

The ATHLETIC JOURNAL

MARCH, 1927
BASEBALL NUMBER

The Fine Points of Baseball
By a Major League
Player

By Leslie Mann

A Symposium on Fundamentals
of Baseball

By Western Conference Coaches

*Carl Lundgren
George Clark
Ray L. Fisher
Otto Vogel
H. O. Crisler
Guy Lowman
E. S. Dean*

The Under-Emphasis on
Baseball

By John L. Griffith

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FUTURE ISSUES OF THE JOURNAL

The March issue, as will be noticed, is devoted primarily to baseball. Our readers who are baseball coaches will find much of value in the articles by Leslie Mann, Carl Lundgren, George Clark, Ray Fisher, Guy Lowman, Everett Dean, Otto Vogel, and H. O. Crisler, all of them national authorities on baseball. Furthermore, it is hoped that our readers who are not baseball coaches will find the articles interesting and helpful. Some of these men who are not now coaching baseball may be called upon to assist with community recreation this summer, where a knowledge of the fine points of baseball will be of value.

The April issue as has been our custom for some time will contain records of the relay meets of the preceding year, together with a program of the 1927 meets.

Many readers were interested in the March and May issues of 1926, which contained a study of track form. Since 1926 new track stars have appeared on the athletic horizon. Our readers will be given opportunity in May to study the form of different track and field men who are on the 1926 honor roll. The June issue will be a "News Review." Readers are urged to send to us, for this issue, news items of this year; new stadiums and gymnasiums should be mentioned; your methods of making athletics interesting for all instead of a few in your schools would be helpful reading; if you plan to go to a new location next year, this will be of interest to other men of your profession.

THE NATIONAL PHYSICAL EDUCATION ASSOCIATION MEETINGS

As the JOURNAL believes that physical directors and coaches gain much from meeting with each other, the special attention of our readers is called to the meeting of the American Physical Education Association, which will be held in Des Moines, Iowa, April 13-16. There will be a joint meeting with the Mid-West Society of Physical Education and the Central Division of the Iowa State Teachers' Association. This is an unusual opportunity for teachers of physical education and all other members of the teaching profession to come in contact with nationally known leaders in this field.

A few of the representative people appearing on the program are:

Dr. Helen Wodehouse, Bristol, England.
C. W. Savage, Oberlin, Ohio.
W. H. Burton, University of Chicago.
Col. Henry Breckenridge, former Asst. Secretary of War.
John L. Griffith, Big Ten Commissioner.
James G. Rogers, National Phys. Educ. Service.
F. C. Allen, University of Kansas.
Jesse Williams, Columbia University.
Dr. Ernest Burnham, Kalamazoo, Michigan.
J. B. Knight, University of Iowa.
C. S. Danbert, Iowa State College.
D. W. Morehouse, Drake University.
Mayant H. Doubler, University of Wisconsin.

THE ATHLETIC JOURNAL

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The ATHLETIC JOURNAL

Nation-Wide Amateur Athletics

Volume VII

CHICAGO, ILLINOIS

Number 7

The Fine Points of Baseball By A Major League Player

By Leslie G. Mann

THE purpose of this series of articles is to give detailed instruction in all of the baseball arts from the ground up and in all departments of the game to ambitious young players of school, college, club or sand lot ball; to develop latent ability in young potential stars and to illustrate how the elements of good sportsmanship and fair play enter into every angle of the great national game.

Because success to the young player means the securing of a proper coordination between mind and muscle, the mastering of fundamentals until they become second nature, too much emphasis can not be put on the study of fundamentals.

Batting

Three general factors enter into successful batting: (1) Keeping one's mind on one's work; (2) hitting good balls and (3) batting form (most important of all).

1. When playing baseball, the player should forget everything else. He should *think, talk and act* baseball; he should leave business, studies and all worries outside of the park. I have known players to talk of their past fishing trips, real estate dealings or the enormous amount of money they are expecting to make in their oil investments. All these create such an independent air in the player that he forgets all of his desire to win the game. He roams about listlessly,

Success for the young player means the securing of a proper coordination between mind and muscle; the mastering of fundamentals until they become second nature.

gazes about aimlessly and to the spectators, apparently is playing his part, but his heart and the spirit of do or

the course of the ball.

2. In hitting good balls, the following factors are involved:

a. Daily practice.

In all my fifteen years of baseball, I have noticed players who are experts at batting, feel the sting of not getting their daily batting practice. This practice means hit, hit, hit, all kinds of pitching, fast balls, curve balls, slow balls. Many times I have heard players "crab" at this pitcher or that pitcher for not putting his stuff on the ball, for not getting it over the plate.

b. Hitting balls directly back at the pitcher. This is the reason why many pitchers do not put the ball over the plate, but instead throw one outside, then inside, then high, then low. If the pitchers only real-

THE article "Fine Points of Baseball by a Major League Player" is the result of a study of baseball in all its phases by Leslie Mann. As an active player in the National League for fifteen years, Mr. Mann has had an opportunity to note the comments of managers, hear the discussions among players and study the technique of many great baseball stars. Mr. Mann gives much credit to the National League baseball players who have sacrificed many leisure hours and generously given of their time to uncover the elements of inside baseball, upon which their success has depended.

die are not beneath the uniform. One cannot bat successfully, catch fly balls or throw to the proper base when one's mind is engrossed in details of business, mathematical problems or social engagements. One must follow every play in the game, school the muscles to work instinctively with the brain, to sense the plays and situations until mind and body become a well-schooled unit, a well-oiled baseball machine. Above all, the player should constantly keep

ized that this practice is what makes them better batters and consequently might win a game for them, they would put the ball over the plate for strikes all the time. Rogers Hornsby is a great exponent of driving the ball directly back to the pitcher. He believes this trains his muscles to react in proper timing on all pitchers. Pitchers are often seen wearing the catchers' shin protectors while working in the box during batting practice.

c. Hit the ball on a line.

d. Train the arms to move on a level plane.

e. Wait for the ball to reach an imaginary spot you have in mind before swinging. Because of this little habit it is most essential that the batter secure a proper stance at the plate at all times to cope with this element. This stance will be taken up at its proper time.

f. Never guess what kind of a ball will be pitched. Study the pitcher's motion and follow it through closely with the eye. You can always tell a guessing batter by his actions at the plate. If he happened to guess right it would look as though he had applied superhuman force behind his swing and if he connected with the ball it would travel like a bullet shot, but if he guessed wrongly, he would be all out of stride, over-balanced and a total failure as a batter.

In talking with "Dazzy" Vance one day after he had posed for my motion picture course, we got to discussing habits of batters. He said, "I know batters up there at the plate are trying to read every little move, false or otherwise, of the pitcher that might reflect his intentions, a curve, fast or slow ball."

"You wouldn't call that guessing, would you?" I asked.

"No, not exactly, because many pitchers have a bad habit of doing just a little something different on their curve ball than they do on their fast ball, and if the batter knows this and sees it he is prepared in advance, so it really isn't guess work."

"Dazzy" Vance gives in detail in the pitching article of this series, some of the little habits that reveal the kind of ball that is going to be pitched.

g. Make the pitcher pitch the ball over the plate; don't go after bad balls:

3. Most important of all in successful batting, is form. All success-

ful players have perfected their own form to suit their own needs. Success depends on determining one's form and perfecting it to the highest point of efficiency. In the following comments, many world famous stars will reveal their own particular style at the bat, and the methods they use to get the best results. Any one of these may be your natural style at bat. Observe closely every phase which enters into these batting styles. What other batters have done, you may do by giving close attention to details.

Position of the Bat in the Hand

When the upper hand grasps the bat, the handle never should be placed to permit the thumb or fingers to be behind the driving power of the swing. Batters with a pulling effect in their swing invariably cross the rear arm over the forward arm, thus bringing the wrist above the bat at

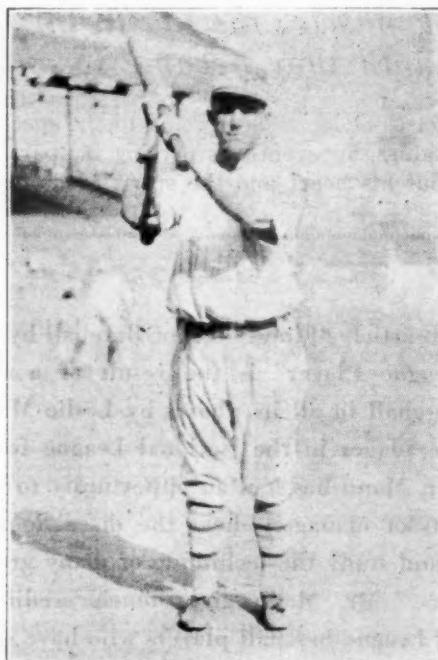


Illustration 4

the moment of impact with the ball, throwing the weight of the power on the fingers and causing a downward swing. This is incorrect. Batters with an uppercutting habit drop the wrist below the bat, thus putting the weight of the swing on the thumb. This is also incorrect.

In the correct way of holding the bat, the handle of the bat should rest in the groove formed by thumb and forefinger and rest across the middle of the palm, so that the power of the swing will find the forearm and wrist straight; this will put the maximum weight of the body into the swing. There is no set way of holding the bat. It depends upon the individual characteristics and the discovery by the individual of the most effective grip for him to use.

The long grip. (Illustration 1.) Practically all leading baseball players today use the long grip. They select a bat that feels easy to handle in swinging. The hands grasp the bat at the extreme end or handle end when testing their selection.

The choke grip. (Illustration 2.) Very few players use this style of grip. Players that do are usually short chop hitters, good bunters and sure to hit the ball instead of striking out.

The Ty Cobb grip. (Illustration 3.) In this grip the hands are distinctly separated, a distance of about three or four inches. This grip affords a little better control of the bat than the long grip. The hands assume the long grip style.

The Heinie Groh grip. (Illustration 4.) This is a style perfected by Heinie Groh only. He has the most peculiar and sensational bat ever used by any player. It resembles a grown-up potato masher, a short bat of about thirty inches, half handle and the rest of the bat all bat. He places one hand at the half-way mark partly on the all bat position and

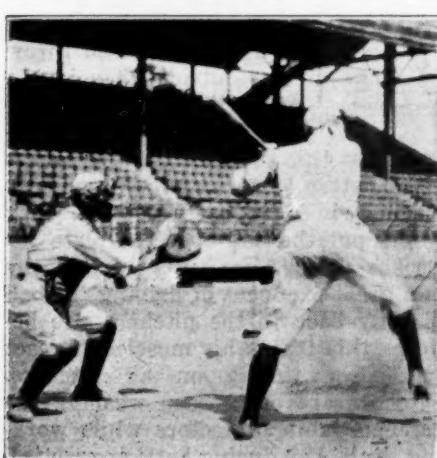


Illustration 1

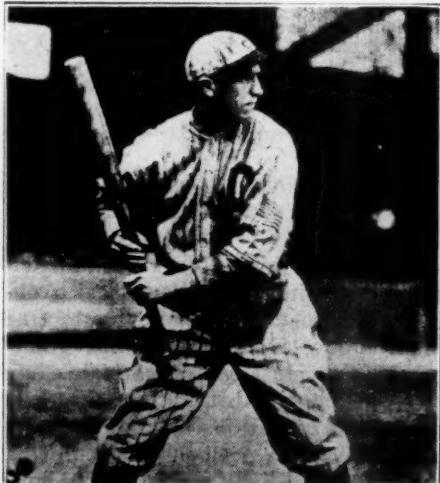


Illustration 2

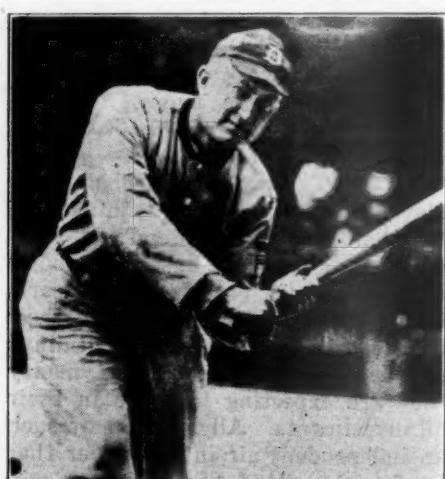


Illustration 3



Illustration 5



Illustration 6



Illustration 8

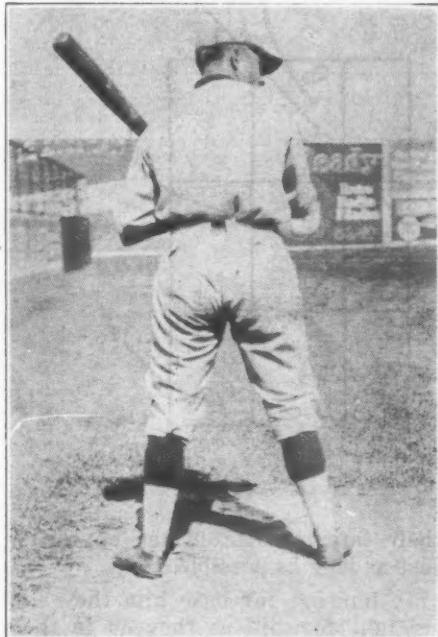


Illustration 7

partly on the handle, and the other hand on the handle.

Grips for bunting. (Illustration 5.) Right hand: Firmly pinch the thumb and forefinger as the bat meets the ball. The right hand is run up to about one-half of the length of the bat; the palm of the hand is turned directly toward the ball. Left hand: Release of the grip successfully softens the rebound of the ball. If the grip is loosened just enough to allow a give of the bat as the ball comes into contact with it, the rebound will not be so solid or the ball will not rebound with a bang.

Faulty bunting grip. (Illustration 6.) This style results not only in a hard rebound but also includes the possibility of serious injury to the fingers. Both hands grasp the bat tightly and the fingers surround the bat.

The Batter's Stance

Heinie Groh's front facing stance. (Illustration 4.) The right foot should be placed six or seven inches in front of the plate, the toes pointing directly toward the pitcher, the left foot slightly separated from the right to insure perfect balance.

The weight should rest equally upon the legs, with the knees straight, the belt line on a level line, the body erect and shoulders on a level line. Groh doesn't advise players to adopt his style at the bat unless they are to correct a fault that has crept into their style and they desire a change. This stance was adopted by Groh when he failed to correct a bad habit of pulling with his front foot in striding during batting. Then when he turned and faced the pitcher, pivoted and stepped forward toward the pitcher, his long bat was off balance and balls pitched on the inside

corner found their way into the catcher's glove. This brought about his discovery of the short fat bat. Then he discovered that by holding the one hand at the halfway mark, palm out toward the pitcher, he could hit any ball that his right hand or hand at the half way mark could slap, if no bat were in his hand. So he really bats with the palm of his hand only the bat meets the ball instead of the meat hand.

The normal stance. (Illustration 7.) The feet are squarely on the ground to insure perfect balance. The side of the body is presented to the pitcher. The belt line is parallel to the ground. Ty Cobb's stance is a normal sideways stance with a forward bend of the upper trunk. His shoulders are kept on a level line.

Positions in the Batter's Box
Number 1 on diagram 1 is Rogers

Hornsby at the outside rear position, his right foot touching the rear outside line at right angles to the pitcher, his left foot extended forward to the center line, with the toe pointing diagonally toward the pitcher. Number 2 on diagram 1 is used mostly by batters who sprawl or use no step at all. Many of these batters use the choke grip. It is extremely difficult to hit successfully in this position. Number 3 on diagram 1, is a safer position to assume than number 1. Number 4 is the position many batters assume. They believe because the ball has to go over the plate (home base) it is easier to hit from opposite the base than in front or behind it. Number 5 is the position used by left handed batters, who have great reputations for bunting for hits or dragging down the first base line. Number 6 is a better position to assume than number 5 because it affords more space between the home base and the batter for balls to pass. Numbers 7, 8 and 9 are selections in the rear of the box by left handed batters.

The theory of the rear position in the box over the opposite of the plate, is that many batters would rather hit the ball *after* it has broken, if it is a curve, drop or fade-away, than hit it in the middle of the break. Most pitchers try to cause the ball to break over the plate. The same theory applies to the front position, that is, hitting a ball before it breaks, only the distance from the pitcher has been shortened so much it takes a quicker reaction to hit the ball. Therefore, most batters today are assuming the rear position.

Batter's Strides

There are three kinds of strides, the sprawl, short step and long

step. The striding plane or direction of step in batting is illustrated by diagram 2. The step is straight forward toward the pitcher in almost every instance except Rogers Hornsby's case. He is so far from the base he must step in and forward. Number 1, diagram 2, illustrates the normal position and normal stride. Number 2 illustrates the direction of the front foot of the batter that pulls or places his foot in the "bucket." Number 3 represents the direction of a left-handed batter pulling his front foot. Number 4 is the normal stride.

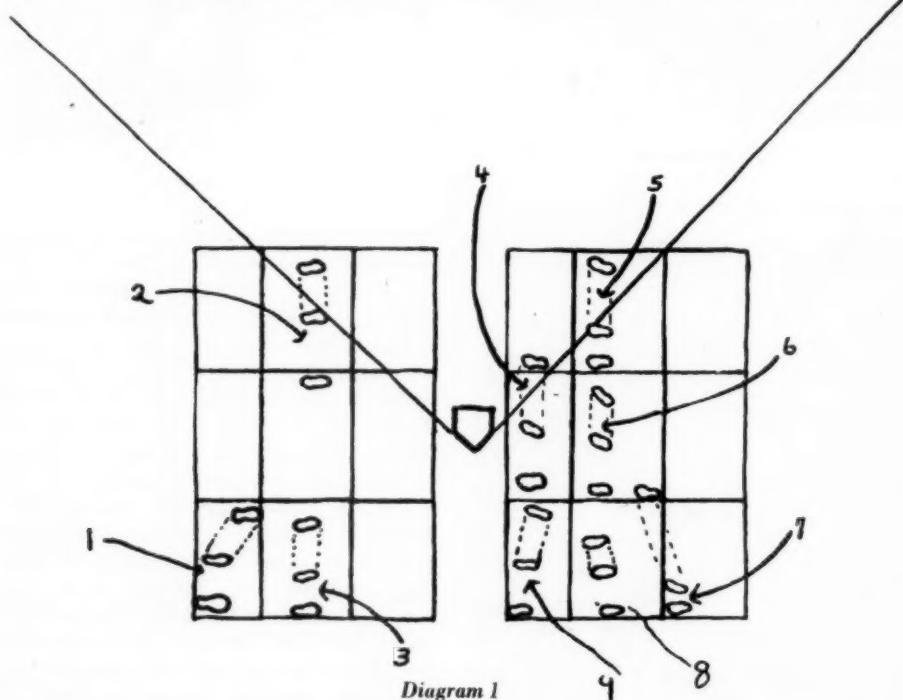


Diagram 1

Number 5—It is considered a bad habit for a batter to move the rear foot in an attempt to keep the front foot in place and hit to the opposite field. Develop correct habits by practicing them until they react instinctively.

Some of the outstanding habits to which the batter's attention is called are best understood by citing how players call out to a batter when they see something as:

Stand up there. Don't be afraid. Step into the ball. Keep that front foot down. (Illustration 1.) Stop cowtailing. (Illustration 8.) Stop bowing at that ball. (Illustration 9.) Keep your rear foot firmly on the ground. (Illustration 10. The real driving power comes from this rear foot remaining firmly on the ground.) Don't run up on the ball. Lean toward the pitcher just before you swing. Keep your shoulders on the level, if anything lower the front shoulder an inch or two. Cut down the stepping too far. Place the rear foot and never move it before a swing, during it or after it, only to

get going toward first base, or to dodge a close one.

Bunting Strides

The bunting strides are divided into two classes: Sacrificing—when the batter intentionally gives himself up, and bunting for base hits—dragging. In this stride the batter may bunt for sacrifice or bunt the ball for a base hit.

Infielders are watching every little move a batter gives that might assist them in getting a jump on the ball. Batters, knowing this, try to keep

normal stride and bring the bat around just at the right time to dump the ball where they want it. For a right handed batter, if he intends bunting down first base line, he executes a kind of push with the bat against the ball down the first base line direction.

The left handed batter executes a pulling around, over and on top effect of the bat upon the ball, at the same time pulling his rear foot around with the bat and getting off for first base. Illustration 5 shows the direction of the stride.

In sacrificing, giving yourself up, the object is to get perfect control of the bat against the ball. The position of the feet is shown in Illustration 6. This position, if assumed early, tells the opposition that you intend to bunt. But control the rebound of the ball off the bat by releasing the grip of the left hand or right as the case may be. In Illustration 6, it is the right hand of a left handed batter.

In bunting be sure the bat is out in front of the batter, and the plate as in Illustration 11. Be sure the bat is held level.

Attention is called to the very common faulty habit of shoving the arms out early but holding the big end of the bat back and bringing it out just in time to meet the ball. This is almost a half swing. Illustration 12 shows the position of the bat just before it is brought forward to meet the ball. Illustration 13 shows an extremely faulty position of the bat in an attempt to bunt the ball.

The Bat Position

The bat swing is a problem that has caused the greatest amount of

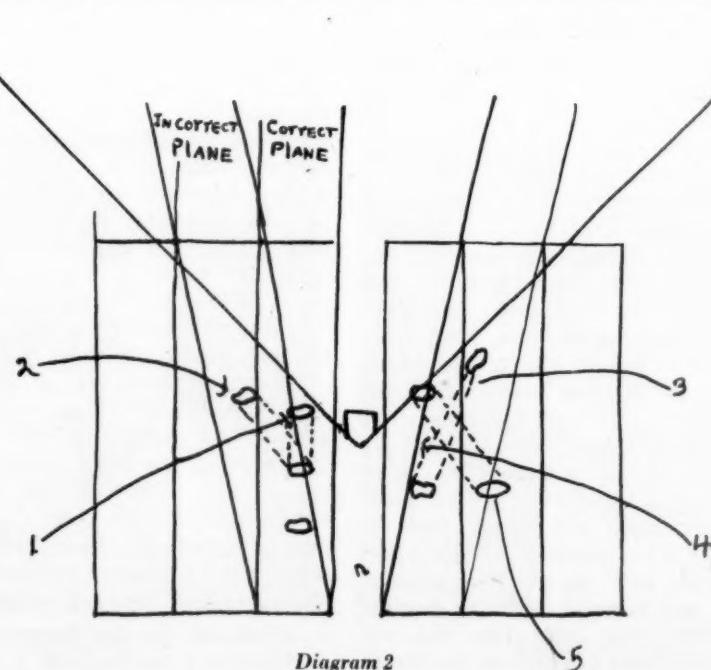


Diagram 2

discussion. Many great batters never really give their bat position before the swing or after it much thought. They just swing and do the right thing instinctively. But to analyze the position and habit is most important to beginners. The bat ought to be held as far back and around in back of the head or shoulders as the arms will permit and still feel comfortable. Illustration 14 shows this position.

To analyze the swing, we will make a study of circle diagram 3. If the batter has rested his bat upon his shoulders before getting set to swing, he can get into this perfect position of the bat just as he is about to swing upon the ball with little or no effect. His arms have lifted the bat up and backward off his shoulders and brought his arms back as far as possible, still keeping his shoulders straight ahead. He should not rotate his body around at his waist until his back is facing the pitcher. He should keep his shoulders pointing directly out toward the pitcher. He should swing with his arms, not his body. Notice the bat's big end is around in back of the head. (Diagram 3, bat No. 1.)

Imagine the circle circling around the batter's shoulders parallel with the ground. The player is the pivot point. Looking at pitcher, point P. Player facing is a right handed batter. Bat No. 1 is at a point zero degrees. This is in relation to that point 180 degrees that the bat is to hit the ball B-2 and all things being equal, will drive it on a line and directly back at the pitcher.

A batter is not a very long distance hitter when his bat is not clear back. (See bat No. 2, diagram 3.) His circle up to the point he hits the ball would be only 135 degrees. He is 45 degrees under the maximum hitting power and all because he has not

placed his bat in the proper position. He can hit this way and very effectively but it is not good to cultivate the habit. Produce your maximum ability in all your efforts. It is easy to do the minimum. (Illustration 15, Groh's stance.)

Bat No. 3 is pointing back toward



Illustration 10



Illustration 11



Illustration 12

the catcher. The circle up to the point of hitting the ball would only amount to 90 degrees, one-half the distance the bat ought to swing before hitting the ball. If the ball is hit, it will not travel so far as otherwise, all things being equal.

Follow through (Illustration 16) shows the follow through method in the correct swinging of the bat in the act of hitting. The player's bat has completed a circle 360 degrees. He hit the ball after swinging 180 degrees but followed through until the bat completed the full circle. (Diagram 3, circle 1.)

Place hitting. Taking Rogers Hornsby's perfect swing of the bat, we will here figure out the distance his bat swings before hitting the ball, B-1. Allow the ball to pass that spot B-2 or 180 degrees and go on until it reaches P-1, 120 degrees. Consider the ball's distance from the pitcher's hand to that spot B-2, where it will be hit directly back at the pitcher as a distance of 100 degrees P-2.

Hitting to the right field. Bat 1 swinging and hitting the ball at 120 degrees, P-1, would have to swing only a distance of 160 degrees. One hundred eighty degrees minus 20 degrees (extra distance ball traveled) equals 160 degrees. The reflection of the ball off the bat is always at right angles. Therefore the ball hit at this point will go straight to the right field (right-handed batter).

Hitting straight away. A ball pitched P-2 travels an imaginary distance of 100 degrees. The bat will swing a circle of 180 degrees B-2 or that point where the extreme maximum pounds of effort has been reached. Ball reflecting at right



Illustration 13



Illustration 9

angles will travel back directly to the pitcher.

Hitting to the left field. Ball pitched P-3 travels the imaginary distance of 80 degrees. The bat will have to swing a circle of 200 degrees B-3. Ball reflecting at right angles will direct the ball to the left field.

Habits in the Batter's Box

The batter should at all times keep his eyes upon the pitcher when in the box. He should never lower his head. If he must adjust his hands upon the bat, he should step out of the box. There is only one time that the batter can really take his eye off the pitcher, and that is when the pitcher does not have the ball in his hands.

All signals are on providing the batter is in the box. To call signals off, he should step back out of the box. Then if he is sure his base runner is looking at him, he can give him the signal for the hit and run or squeeze play without taking his eye off the pitcher. The time for him to give signals is immediately after the ball has passed him into the catcher's hands. He should not wait for the catcher to throw the ball back to the pitcher. They are watching him for signals that might tell them what he intends to do.

Looking for Signals in the Batter's Box

Batter's Box

It is an art for the batter to look for signals, getting them from the manager or captain on the bench or from the coaches upon the lines. The batter should, if his players' bench is over in the direction he is facing while in the box, look up immediately after the ball has passed him. This look

should not be a deliberate look, as a look at the bench, signal received and a glance away from the bench immediately. He should hesitate, look again, as though no signal had been given, etc. All signals are better received out of the box. Signals given by the batter are all in the box.

Batting Slumps

Every baseball player some time in his career will go through or has gone through the period of what we call a batting slump. It is caused by many things, such as indigestion, over-anxiety to hit safely, or trying too hard and hitting at every pitched ball.

When a player is angry, he will grit his teeth and is more determined to hit the ball right now and hit it a mile. If the ball is not dropping safely and the player has good eyesight, is in good physical condition, and has mastered good form in hitting, he should try to notice whether he is hitting bad balls. This is the most common fault. To correct this, he should start bunting and do nothing but bunt, bunt, bunt. This is not believed by all managers and players, but is generally held by the majority of players. He should pick a field to hit to. He should hit all balls to the left, then to center field, and then

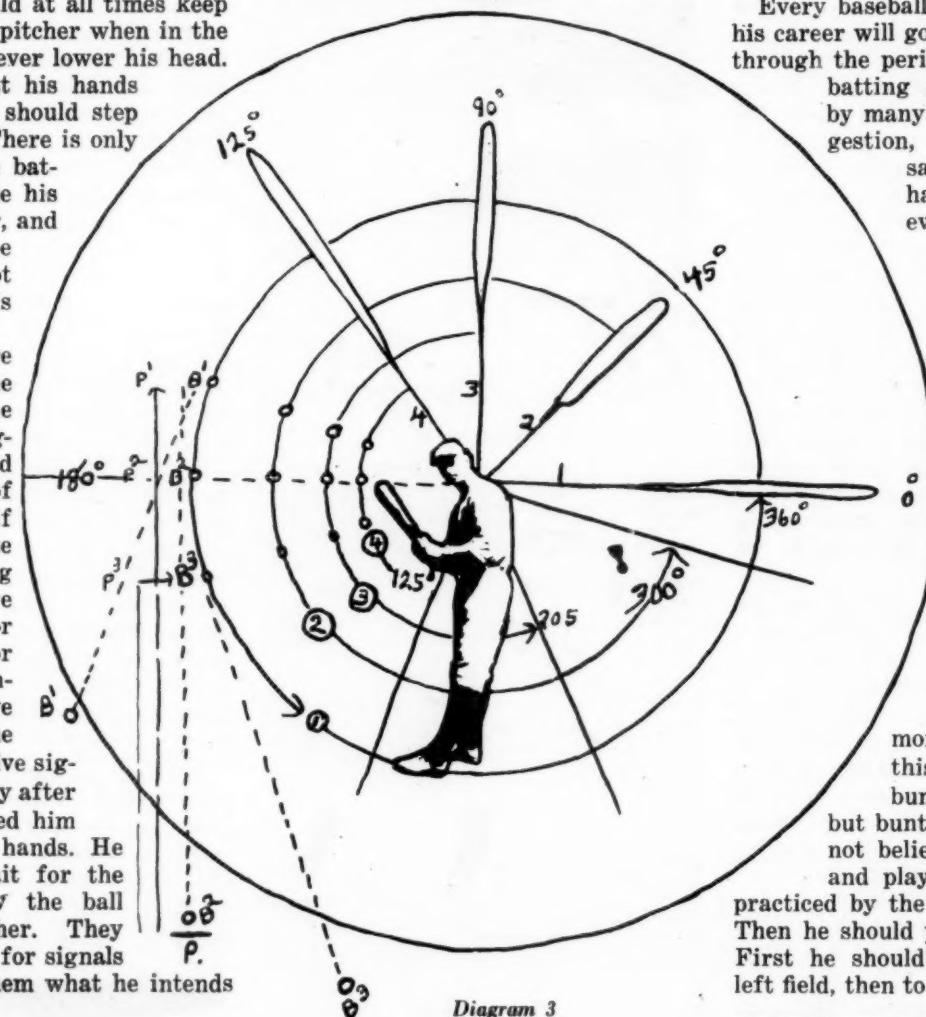


Illustration 14

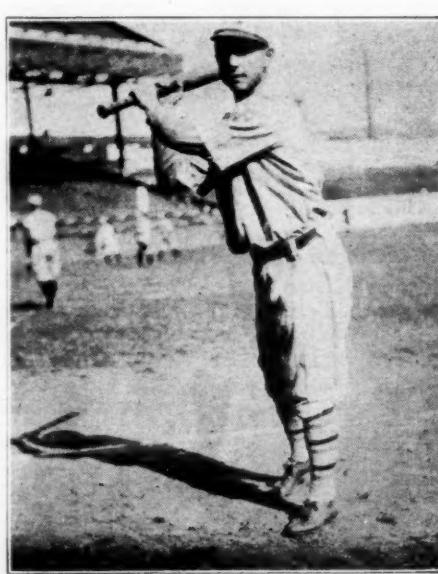


Illustration 15

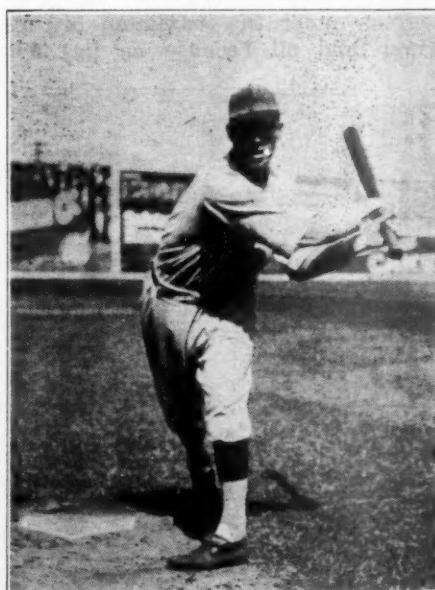


Illustration 16

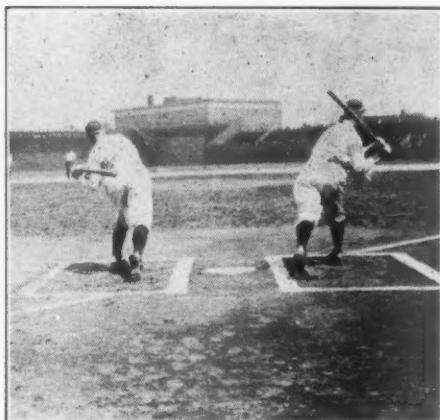


Illustration 17



Illustration 18

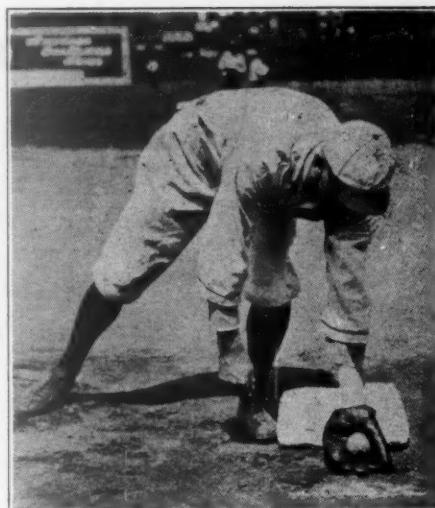


Illustration 20

to right field. By picking his field to hit to, this will help him to "stay off" of balls he cannot hit to that field. He should remember to be calm, cool, easy, relaxed and should not hit too hard at balls, but try to do something with them. A player can learn what good form in hitting is, but he must adopt the method that is most fitting to his own peculiar style of hitting. Too many suggestions are apt to ruin him as a hitter. He should not attempt to change his style. Confidence in hitting comes naturally to a player, and if a coach takes away his natural feeling in changing his style of hitting he takes away his confidence.

Base Running

In studying base running I want to impress upon the minds of the players that it is not speed alone that counts in stealing bases, or circling the bases. It is the knowledge of where to run or the territory covered on the run, under certain conditions. The slowest runner on the team might be the best base stealer, all because he mastered the art of sliding while running. In base running two separate elements must be considered: skill in *running* bases and skill in *circling* bases. The moment the ball leaves his bat the player becomes a base runner. This being true, the batter must dash from home plate toward first base as quickly as possible. Every base runner has two objectives: to beat out an infield hit or bunt, and to advance as many bases as possible on a hit or on an error by a fielder. Accordingly, the batter must be under perfect muscular balance at the end of his swing, to enable him to make a quick break for first base.

As some players are right handed batters and others left handed, two distinct problems are involved in mastering the correct way to make the break from the home plate. The right handed batter is swinging away from first base, his ultimate object, while the left handed batter is swinging



Illustration 19

toward it. Accordingly, the right handed batter must have his body perfectly balanced at the completion of his swing, to avoid the loss of precious seconds in beginning his dash for first. The left handed batter's swing naturally turns him toward first base, where the right handed batter's swing is away from first and toward third. Because he is on the side of the home plate nearer first base, the left handed batter is from five to eight feet nearer first base on the first step. Illustrations 17, 18 and 19 show these points.

Sliding

The greatest skill and daring of a player comes to the surface when he is called upon to slide into a base. He should avoid over-running or being tagged out. He must be perfectly balanced in advance to enable him to slide either to the right or to the left as the occasion demands. He must master all the arts of sliding to save himself from injury, and the possibilities of injury are many.

In sliding the player must jump through the air and strike the ground

with considerable force and with the entire weight of the body. Accordingly, a player should be well schooled in sliding fundamentals as a protection against painful jars and broken bones. By wearing a specially designed pad with his uniform, it has been found that a player may eliminate much of the heavy jar and loss of skin. Max Carey, one of the most accomplished base runners and sliders, has built a sliding pad that is used by 90 per cent of the major leaguers.

The choice of foot with which to tag the base is determined by the direction of the slide. In sliding to the right, the runner leaves the ground with his right foot, extending his left foot toward the bag. In sliding to the left, he leaves the ground with his left foot, tagging the bag with his right foot.

The Value of Body Control

When sliding to the right a runner should throw his shoulders to the right also, to avoid throwing his entire weight directly into the bag. The same principle applies if he is sliding to the left, only it is the left shoulder which is thrown away from the bag. A common error is that of taking off with the right foot for a slide to the left and throwing the left forward expecting to tag the base with the right foot. A player must never slide straight into the bag with his body directly behind the force of the driving power. Many heedless players running from home to first base forget that they can slide into the base if the occasion requires it. Instead, they dash straight for the base, allowing the first baseman to tag them out five or ten feet from the bag.

The Fall-Away slide is executed just as if a player were dodging away and under the hand of someone trying to tag him. The correct principle is to

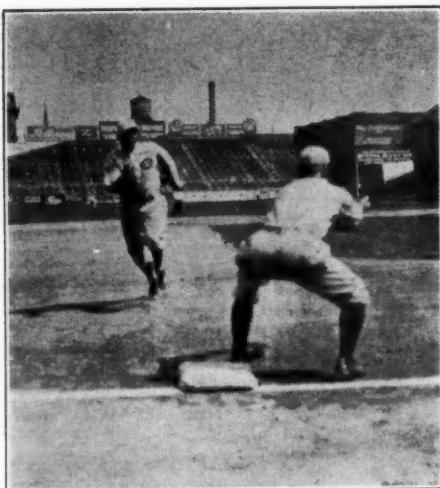


Illustration 21



Illustration 22

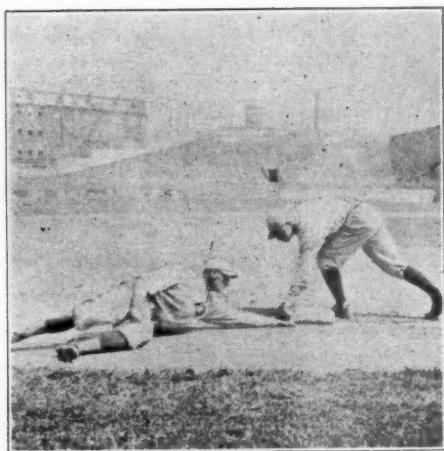


Illustration 24

slide in the direction opposite the one from which the ball comes in a throw to catch a player napping.

In sliding the player should always extend his toe and throw the weight of his body to the side so that the side of the foot hits the dirt before reaching the bag. This prevents the spikes of his shoe from catching in the ground, a common cause for many a broken ankle.

Eddie Roush advises hooking the bag with the instep of the foot held sideways, exactly in the center of the nearest edge of the bag. Many accomplished base runners believe it wise to aim at a point a little beyond the center of the nearer edge of the bag. This prevents the force of the slide from pulling the base runner's foot off the bag after touching it. In sliding to a bag a base runner should cause the toe to hook into the bag and hold on securely. Unless this is done the momentum gained in the slide is likely to pull the player's foot off the bag. In the Hook slide attention is called to the coordination of muscle control in the legs while they are still in the air. If a player hooks to the left, his right foot is high in the air before the left foot leaves the ground. The right foot is held thus extended until the left foot is jerked out and thrust forward, when the right foot is brought down to hook the bag.

An experienced base runner knows instinctively in which direction to slide, from observing whether the opposing baseman is in front or behind the bag. Two elements determine the direction of a slide: the direction the ball comes from and the baseman's position.

Frequently the ball beats the runner far enough to permit the baseman to hold down his hand and let the runner tag himself out, as shown in Illustration 20.

The Evasive Slide

When a player dashes for the base



Illustration 23



Illustration 25

he must think quickly to determine which type of slide to use. This is true particularly when the ball reaches the base ahead of the base runner and the baseman is waiting to tag him out. The player must be skilled in the proper execution of two or more types of slides to cope successfully with such a situation. The Evasive slide, one that is not generally noticed by the public, is the most useful of all slides. When it comes the public sees only that the player has slid clear past the bag, therefore the player made a poor slide. The fact is, it was a perfect

slide. Ed Roush, in Illustration 21, is dashing toward third base, the third baseman is about to catch the ball and Roush can see that the ball is going to beat him to the base. So he makes believe he is going to slide straight into the bag. Just as he leaves the ground in his jump for the base he adds an extra ounce of push into his leg directing his body a little to the right of the bag. He here is shown leaving the ground quite some distance from the base, Illustration 22. His right foot is the foot he jumps from. While in the air he does a rapid shift movement, passing the right leg in front of the left. This throws the momentum of his body still further to his right and enables him to control his left foot, Illustration 23. Notice his body leaning well to the right, doing a quarter turn, from the straight forward facing, to a sideward position. The right side of his hip is towards the ground. As he nears the baseman's arm that is tagging him, he lifts the left leg up and over the tagger's arm, missing the bag and arm entirely. The momentum of his run carries him to the spot that is here shown upon the line extending out towards the left field, the place where the ground has the appearance of having been scraped. After he hits the ground and passes beyond the third base bag, he comes back into the bag with his arm. Some players come directly back to the bag with their under arm, believing this to be the quicker way. (Illustration 24.) It has its good points and bad points. To come back with the arm under, the runner has not the ability to evade the tagging hand so well as he has by coming into the bag with the right hand.

Many players believe that if the player will make a quarter turn (over and upon his stomach) he will pull his left shoulder away from the baseman tagging, and come into the bag

(Continued on page 42)

A Symposium on Fundamentals of Baseball

By Western Conference Baseball Coaches

Early season training in baseball is given over to the teaching of fundamentals.

Pitching

By Carl Lundgren

Baseball Coach University of Illinois

The old saying, "A baseball team is no stronger than its pitchers," is demonstrated daily during the playing season. Pitching, beyond a doubt, is seventy-five percent of the defensive strength of any team—perhaps a greater percentage on college and high school teams. Therefore, it is necessary for all coaches to strive constantly to improve the effectiveness of the pitching on their teams.

Although a player has some natural pitching ability, in most cases there are a great many things that he should be taught as early as possible in his career. Some pitchers have been very successful because their extraordinary physical ability enabled them to outclass opposing batsmen, but these pitchers are few and far between and sooner or later even their effectiveness suffers unless they think, as well as use this natural ability. It is true, of course, that a pitcher with exceptional physical ability is a better prospect than one with ordinary ability, all other things being equal.

In addition to some natural ability, a pitcher should possess these three qualifications—control, courage and judgment. Control is the most desirable of the three because if he has that, it is almost a foregone conclusion that he possesses the others. Also, it is the one thing that he may be sure that he can master. He may not have a good fast ball or a good curve or a change of pace, but he can acquire control, although this may require much more practice for one pitcher than for another. But practice will bring the desired results.

What is meant by control? It is the ability to pitch the ball to a certain spot, or very close to it, at any time the pitcher desires. Not once out of three trials, nor three out of seven, but at any time! Missing the spot may mean the pitch is over or near the center of the plate, permitting the batter to have his best opportunity of hitting hard, which is just

control the ball and his determination and courage to pitch his best cannot be judged completely except in a game. If he is lacking in courage, it is sure to hinder his control as much as all other things put together. This usually shows itself when the pitcher gets himself "in the hole to the batter" on the count of balls and strikes. Then he eases up in order to get the ball

over the plate and as a result, he is no more effective than a much more ordinary pitcher who *has* control. This type of pitcher may be very good when comfortably ahead or behind but may fail altogether when the "going is hard." The pitcher who has the best chance for success is the one who works hard against the batter on every pitched ball.

Where should the ball be pitched and when? Here is where judgment of batters and the conditions of the game should decide for the pitcher. Past experience with batters of the opponent's type, watching him in batting practice

"PITCHING beyond a doubt is seventy-five percent of the defensive strength of any team—perhaps a greater percentage on college and high school teams." Carl Lundgren.



"THE first cardinal principle for the shortstop is complete relaxation. Without this, the poise and grace which characterize the natural ball player will be lacking." H. O. Crisler.

what the pitcher is trying to prevent.

Another point is this. A batter may stand on one pitched ball in such a position as to indicate that he will be unable to hit well if a ball is pitched to a certain spot but on the next pitch he will change his stance and thus an opportunity has been lost. There is a right time to pitch a ball as well as a correct spot to which to pitch it. Because a pitcher does not give bases on balls is no indication that he has control or that he won't be hit hard. If he is able to pitch close to where he wants to and when he wants to, it is almost a certainty that he will be successful.

All this has reference to pitching in a game, not in practice or to a catcher, because a pitcher's ability to

and studying his stance at the plate should give a very good idea of how to pitch to him and after he has made one offer at a pitched ball there is usually no question. The direction in which he hits naturally, the length of his swing, the distance he stands from the plate, the position in which he holds his bat, the length of bat, the swing of the big end, position of shoulders, hips, heels, toes and head, length of stride, direction of stride with front and back foot, all tell their own story as plainly as words. Thus pitching becomes a very interesting study and the sooner a study is made of it, the better for the pitcher.

There are several other phases of the game that should be taken up as early as possible with the pitcher. He should learn to land correctly with his

right foot if a right-handed pitcher and not pose or poise. This right foot should come down to the ground and the body be controlled just as quickly as this can be done, because the pitcher becomes an infielder as soon as he releases the ball.

He should learn the value, as well as the danger, of a pitchout and how to make it. Its purpose is to assist the catcher in his attempts to throw out base runners and to prevent the batter from hitting or bunting the ball on offensive plays such as hit and run, bunt and run, squeeze plays, etc. The pitcher should keep in mind that the ball is not to be hit, therefore he should give all his attention to getting the ball away fast and sacrifice his speed for quickness. Since the pitcher assumes that base runners are to run, one danger lies in pitching the ball where it can be hit, perhaps through the area left vacant by a baseman going to a base to receive an expected throw from the catcher. The other danger lies in throwing too many pitch-outs and losing an advantage with the batter.

The pitcher should practice continually on making his delivery to the batter as quickly as he can, thereby decreasing the time that a baserunner has to advance while the catcher is making his throw to retire him. The same thing applies to throws to bases. Quickness and accuracy of throws and not speed on the ball is desired. Baseman must handle the throws well, therefore, they must not be too hard. A very common fault of pitchers is lack of ability to prevent baserunners from getting a big lead to steal but it can be overcome to a very large extent by learning to deliver the ball quickly to the batter and to the bases.

All rules pertaining to pitching, and the reasons why they were made, should be thoroughly understood. Except for two or three, there never were any rules written but for the purpose of handicapping the pitcher and to benefit the base runner. If this point is kept in mind there will be little trouble so far as rule interpretation is concerned.

A pitcher's legal position is often questioned, particularly as to his feet and hands. Two feet on the rubber means that when any part of each foot is touching the rubber, no matter where the rest of the foot is placed, they are on the rubber. One foot or the other in front of the rubber means any part of one foot touching the rubber and the other inside or any part touching the lines drawn per-

pendicular to the rubber toward the home plate and at the ends of it. The hands must come to rest before pitching at some chosen spot and all pitching must be done thereafter with hands coming to rest in the same spot.

The balk rule is often misinterpreted or misunderstood. There is no penalty for a balk unless the umpire calls it a balk, even though one is made, which explains the use of balk moves to deceive baserunners. Pitch-



THE second baseman might be called the quarterback of the baseball team, which means that he should be alert, aggressive, brainy and have qualities of leadership."

George Clark.

As batting and base running comprise the offensive in baseball, two-thirds to three-fourths of the practice period should be spent on these fundamentals; the other one-third or one-fourth should be devoted to field work, to defense, and to the co-ordinating of infield and outfield defenses."

Guy Lowman.



ers should know that they cannot make a balk except with one runner or more on bases; that if he is out of the pitcher's box he cannot balk regardless of whether or not he has the ball, except by throwing or bluffing to throw to the plate, and that if he is in the box he must have the ball.

Instructions concerning the foregoing matters should give a pitcher a good foundation from which to develop.

How to Play Second Base

By George Clark

Baseball Coach, University of Minnesota

In selecting a second baseman, more than playing ability should be considered. He might be called the quarterback of the baseball team, which means that he should be alert, aggressive, brainy and have qualities of leadership. Aggressive college teams are usually winners, and the necessary aggressiveness required is often found in a player who does not have the class in fielding and throwing. The material at hand in most cases is not so abundant that a place cannot be found for this man. Everything considered and because of its location, second base is an excellent place for him. Plenty of practice in fielding ground balls with throwing will help remedy the weak arm and help the slow player. The former must strive to field the ball cleanly, while the latter must be quick to start.

The position of the second baseman should be closer to second base than to first base and as far back of the base line as he is capable of playing. He may move slightly closer to the bag on double plays and when expecting a steal. His position should be five to ten feet in front of the base line to cut off runs at the plate.

The second baseman has the largest territory to cover on the infield. On ground balls he should practice a quick start, going forward to meet slow rollers and high bouncers, always fielding the ball as close to the body

as possible. It is essential that he have a great deal of practice catching fly balls in behind his position and also behind the position of the first baseman.

After fielding ground balls, if time permits, an overhand throw should be used, otherwise it will be necessary to throw from position. On double plays he should make his throws at least waist high to the short stop. He should toss the ball if close to the short stop but on long throws should turn to his left if running, otherwise to the right. In some cases he will be able to make a double play by tagging the base or the runner.

The second baseman in most instances will be required to cover second base although with runners on and a sacrifice expected, he should be alert to cover first base. In taking throws from the short stop and third baseman on double plays he will find it advantageous to get in position for the throw as soon as possible. This

will permit him to step inside of the diamond with his left foot thus avoiding contact with the runner on making the throw. He should always make sure of the first man. In taking the throw from the catcher he should play in front of, or straddle the base in a low position, ready to take a new position for tagging the runner, should the catcher's throw be wild. Catching and tagging should be with one motion if possible. *Hold on to the ball in tagging.*

Backing up first base should be a habit with the second baseman, when balls are hit to the left side of the infield, particularly on throws from the pitcher to the catcher. It is a common rule for the second baseman to back up the base hits into the left field and to cover it on hits into the right field.

Team play about second base is essential. A nice working combination here appeals to the fans and reflects directly on the coach. Word signals or signs between the men should be definitely understood. Clever talking with action by second baseman and shortstop will hold a runner close to the base. Detailed play around second base will show results in close games.

Third Base

By Ray L. Fisher

Baseball Coach, University of Michigan

Third base or the "hot corner" as it is more commonly called, is one of the hardest positions on the infield to play properly in good competition, and strangely enough, it is also probably the easiest in a poor class of ball.

The reason for this is that in good competition a third sacker must be on his toes at all times as practically every batter will have an eye on him to see if he is prepared to field bunts. Then he has the "bunt and run" or the "bluff bunt and run" from second base which plays are, in my opinion, two of the toughest in baseball. In the poorer class, all a third baseman has to think of is to field such balls as may be hit to his section and this is probably the easiest position from which to handle ground balls since they usually come fast enough to decrease greatly the possibility of bad hops.

In playing third, a man must possess a good arm and be able to throw from any position as he is required to make many long throws as well as to throw, in some instances, while off balance. He should be capable not only of going in fast on bunts but of sensing a batter's intention of bunt-

ing. He should cover all slow hit balls to his left and should be able to slide into throwing position on balls to his right. When second base is occupied, he must of necessity keep an eye on the base runner until the ball is pitched so as to cover in case the runner attempts to steal. At the same time he must not leave his position open.

The reason I consider the "bluff bunt and run" and "the bunt and run"



"**T**HIRD base is one of the hardest positions on the infield to play properly in good competition and strangely enough, it is also probably the easiest in a poor class of ball." Ray Fisher.

"**B**ASE running is so important a phase of the game that many games will be won by it, if much time is spent on it during practice, and many games will be lost through it if no time is devoted to it." E. S. Dean.



so tough for a third baseman is this: if he breaks to cover the bunt, it is practically an impossibility for him to return in time to cover the bag, while if he covers and the batter bunts, he looks equally foolish.

A third baseman should never back up on balls hit directly at him. Of course, like every other rule there might be exceptions, but they are so rare that in this case, they need not be mentioned.

I have been asked many times how

far a man should play from the bag. I do not believe there is any stated distance. It depends upon both the hitter and the pitcher. Certainly the third baseman should play closer with a slow or curve ball pitcher working against a right-handed hitter, than when a fast ball pitcher is working.

The same inability to state precisely the third baseman's position holds true in regard to playing "in or out." He should always close in when a fast man is up, while he may play much deeper on the slow ones. He should also play a little closer against left hand hitters than against right-handers.

Outfielding

By Otto Vogel

Baseball Coach, University of Iowa

Strong defensive play is as great a requisite of good outfielding as is strong offensive play. An outfielder must be more than a good batter and a good base runner with an alertness on bases, with ability at stealing bases and ability to slide. Besides his thorough knowledge of offensive play and rules, he must be a good defensive player. The qualifications of a good defensive player are: The accurate handling of fly balls and ground balls; fleetness of foot; a good throwing arm; and a thorough knowledge of what constitutes good defensive play, especially the details of backing up plays.

An outfielder should always get under a fly ball as quickly as possible, and not loaf after the ball, just barely reaching it. A gust of wind, or a curve in the ball and an error is the result. On ground balls, the outfielder should get squarely in front of the ball so that a bad hop can be followed. All throws from the outfield should be overhanded. An overhand throw eliminates the curve, and also has more carry to it than has a sidearm or underhand throw.

With men on bases a fly ball should be caught as closely as possible to the throwing arm, so as to get rid of the ball quickly and eliminate loss of time.

On a ground ball when there is danger of a man advancing a base, the ball is fielded as quickly as possible by the outfielder coming in fast, throwing his body to the left or right in fielding, depending on the thrower, so as to cut down loss of time, then raising and throwing the ball in overhanded. In this case chances must be taken to field quickly.

A fielder should get the ball in to

the infield as quickly as possible, and knowing what the pitcher is throwing, hop the ball in unless a very short throw is in order. Every play that is made on the infield should be backed up by an outfielder; the right fielder backs up the plays to first; the right and center fielder the plays to second; the right and center fielder the plays to short and the left fielder backs up the plays to third base. The outfielder must always be on the alert to cover overthrows and errors.

After the ball is fielded, the outfielder should know what to do with the ball, to which base it should be thrown, whether to cut off the man scoring, or keep the other base runner from advancing. For example; a man is on second and the hit goes to left center. The man on second can score even if a perfect throw is made. Obviously, the play should go to second base to keep the runner on first.

All the outfielders must back up each other. The center fielder backs up the right and left, while the right fielder backs up the center fielder on a ball hit to right center. The left fielder backs up the center on balls hit to the left center.

On a foul, with one or no outs, a fielder should be able to judge whether he will be able to catch the ball and hold the man on third, or whether the man can score. If he can score and it is the winning run, he should not field the ball. If, however, it is not the winning run, he should field the ball.

On low drives to the outfield, he should play the ball safe, unless the tying or winning run is on third. Then if the outfielder has a chance to field the drive he should do so, if not he should play the ball for a base hit. The outfielders must help each other on relay throws. If the ball is hit past the left or right fielder and the center fielder cannot back up the play, he should swing in between the man fielding the ball and the infilder. He should take the throw and relay to the base.

If the hit is not deep enough for the center fielder to make the cut-off, he should help the other outfielders by calling the base to which the ball is to be thrown.

On average hit balls to the outfield, if not thrown directly to the base, the ball will be relayed either to the second baseman or shortstop who go out to meet the ball, if they are not covering a base.

An outfielder should watch the batsman closely and should know whether the pitcher is throwing a curve, fast ball, high, low, inside, or outside. By watching the batsman, he will be able to tell by his swing whether he hits into left, right or center field. By

knowing what the pitcher is throwing, he will know where the batsman is most likely to hit the ball. This will permit him to get a fast start, which is often the difference between catching a ball and a base hit. The direction in which the wind is blowing must be observed, and whether ground balls are hopping true in the outfield. This must be observed in warm-up practice. The offensive play is developed by constant practice, especially on the points in which the outfielder is the weakest.

The offensive qualities are covered in articles dealing directly with batting and base running, while the rules must be read and studied to get a thorough understanding thereof.

How to Play Shortstop

By H. O. Crisler

Baseball Coach, University of Chicago

Under normal weather conditions, with the bases unoccupied, the position of a shortstop in general is about eleven yards from second base and eleven yards back of the base line between second and third. This position varies, relative to the type of player batting, the number and position of men on bases, the score and inning.

The first cardinal principle for the shortstop as well as all other players is complete relaxation. Without this the poise and grace which characterize the natural ball player will be lacking. Tension is conducive to fumbling and awkwardness and causes the individual to "fight the ball."

As the pitcher prepares to deliver, the shortstop should assume a comfortable stance with the feet spread about a foot and a half facing the batter squarely. He should expect every pitched ball to be hit to him. This ought to cause the weight to be shifted from the heels to the balls of the feet with the delivery and thus put the shortstop in an excellent preparatory position to field the ball.

The shortstop should get in front of the ball as quickly as possible with no extra flourish or lost motion. He should get set momentarily before fielding the ball so it can be taken on the pick up or a long bound. The little fingers ought to be together unless the ball bounds exceptionally high, the heels fairly close together and the toes spread as the ball is caught. As the individual becomes adept in fielding the feet may be spread farther apart if greater ease results. The frequently repeated saying of "keep your eye on the ball" cannot be stressed too strongly in baseball as in most other games. The infilder should look to the base to

which the throw is to be made just before the ball arrives and thereby "dub" the play.

Most of the shortstop's throws should be made over hand for it is faster and more accurate. The ball should be released over the ends of the first and second finger. He should not rotate the wrist and allow the ball to roll out across the index finger, as this has a tendency to curve the ball and render it difficult for the receiver to handle. The short arm throw is probably the best for infilders. The ball is brought a short distance back of the head, the forearm and upper arm forming a right angle. The throw is executed with a snap of the arm and with a follow through of the body. Some shortstops use a full arm throw in which the ball starts well back of the body with the arm fully extended. It is essential however, for a shortstop to employ the side arm and under arm throws at times such as a slow hit ball by a fast man. The ball must be fielded with one hand and the throw started underhand in one continuous motion. In starting a double play, second to first, the shortstop should field the ball and without straightening up, throw side arm or under arm to the second baseman. The ball should be thrown to the latter's left side, chest high, in order to make the play fast at first.

In receiving a throw from the catcher the shortstop should take a position on the front corner of the base or straddle it, facing a little toward first. He should catch the ball and touch the runner in the same motion if possible. If the throw is on the first base side, he should move over and touch the runner when he passes. If the ball comes on the third base side, he should shift the feet to catch the ball rather than stand still and miss it. A good shortstop will not hesitate to dive in the attempt to get the ball in to the base to tag the runner. On all close plays, in which the opponent slides in, he will try to get the ball into the base ahead of the runner rather than attempt to tag some part of the body.

In making a double play, second to first in which the shortstop takes the throw at second, he should time the play so as to touch the inside corner of the base at the time the catch is made. The ball should be caught chest high on the right side to be in good position for the throw to first. He should not be too anxious to make the play at first and thereby miss the ball. It is well to be sure of retiring the first man on all attempted double plays.

If the bases are full, the shortstop ought to move in near the base

line in order to cut the run off at home and attempt the double play home to first. If the bases are full and one out, the short stop and second baseman may assume one of two positions—play in for the double play home to first or play back and take a chance that the ball, if hit to them, will be so the double play can be made second to first.

The shortstop should take all fly balls back of third base that can be reached for the reason that the third baseman must back up while the shortstop is in position to run directly.

The Division of Work in a Practice Period of Two Hours

By Guy Lowman

Baseball Coach, University of Wisconsin

It is impossible to give a division of work for the practice period which might be accepted as the daily routine for the season, because of the fact that the indoor period or the work of the early season is largely given over to the teaching of fundamentals in all departments of the game. In outlining the work for the practice period I shall assume that the early season work has been completed and that the team is now participating in a two-hour daily practice period outdoors.

The attack begins at the bat. Batting and base running comprise the offensive in baseball, so all men should have plenty of work in this department of the game. As a rule, I give two-thirds to three-fourths of my period to batting and bunting, combining base running with this work. (The amount of time however depends upon whatever other phases of the game need attention.) The other one-third or one-fourth of the period is given over to field work, various defenses, backing up by both infield and outfield, and to the co-ordinating of the infield and outfield defenses, or to the team play of the infield and outfield. It is well in this work to have the pitcher on the mound.

To be more specific, the daily practice might be something as follows:

3:30 to 3:50 P. M.

General warming up period. Calisthenics, including shoulder and arm movements, trunk bendings, and some leg work, should precede all other phases of loosening up. Limbering up exercises by easy passing back and forth with the ball in pairs, short distance. Pepper games, three or four men to one hitter. These pepper games serve as a conditioner as well as a means of general warming up. Have some system in the general warming up period.

Practice Period 3:50 to 5:00 P. M.

Hitting practice: straight away hitting, bunting, also some base running, and may include work on special offensive attack. Use regular pitchers with a catcher. Scrubs or freshman batteries may be used, but it is always well to hit against good pitching. If the squad is large, facilitate conditions by putting up two or three screen hitting backstops. Group the men, keep the first fifteen men hitting from the plate under the direction of the coach.

Straight away hitting for the first few times around, each man hitting three balls, picking his ball, or bunt the first one or bunt one out of the three. Following this, go up and hit one and jog down to first base. The next time up, hit one, take the turn at first, and go all the way to second, or all the way around, receiving instructions on how to take the bases.

A short period might be given over to sacrifice bunting, stressing form, also some work on the push bunt or long bunt, and bunting for base hits. The hit and run, the squeeze play, and the plain steal may also be developed during the hitting period. Sliding may be developed with the steal or in taking the bases. Have coaches at first and third, using regular signals when working out special attack.

Finish the hitting practice by having men go up and take just one cut at the ball, also time men once or twice in going down to first. This develops interest. Check them once in going all the way around.

Field work may also be brought out during the hitting practice, for example, as soon as the man at the plate hits three, he goes to the field until his turn comes to hit again. The assistant coach or one of the pitchers may be hitting to these infield or outfield men. Quite often in hitting practice I have my shortstop and second baseman follow each other in order so that they can be in the infield at the same time and in this way can be given work on playing the double at second base. Pitchers may be permitted to handle ground balls in the infield during this period, also to chase fly balls in the outfield. They need this for endurance.

5:00 to 5:30 P. M.

Field work, both infield and outfield. Have a few minutes warming up period following hitting period and before taking the field.

Develop a definite system of working out the infield. As a rule, start at third base, hit to each man in order and play the ball to first base for a few times around, each man tak-

ing his throw-down after he has made an assist. The second baseman and shortstop should come in for the short throw for a few times until the catcher's arm is warmed up. Dump the balls down in front of the plate for the catcher. Next play the double for a short period, then come in on the grass and play the ball home, or let the men play the ball wherever they wish; this option develops alertness on the part of all infielders.

After playing the regular routine, the coach should begin to call special plays. The pitcher should be on the mound for this part of the work so that he may learn to fit in on backing up and covering first base. Pitchers should be given some work on covering wide hits to first, also covering first on a push bunt. All conceivable situations should be brought out in the infield practice. The coach might place men on bases and stress the defense for the bunt, the double steal, etc. Finish by hitting a few high fly balls to the infield and to the catcher, drop a few balls back of first and third, and have the men get together on these.

It is understood that outfield work is being carried on at the same time as the infield work, but at the close of the period co-ordinate the infield and outfield play by hitting balls through the infield to the outfield, having the outfielder get the ball in to the proper base, with infielders and all other men backing up. Bring up all methods of defensive play at this time; for example, man on first base and a hit to right field, or man on second who is coming in on the hit. Also hit balls through the outfield, sending an infielder out for the relay, getting the ball in to the proper base. Drop a few fly balls just back of the infield so that outfielders and infielders may develop teamwork on such hits. The coach might put men on bases and have the outfield get the ball in to the proper base or ahead of the runner. Finish this period by hitting a few fly balls over the outfield or a few fly balls between outfielders to develop teamwork in going for the ball. Don't fail to give outfield work on ground balls the same as on fly balls.

Base Running

By E. S. Dean

Baseball Coach, University of Indiana

It has been said many times during the last few years that base running is a lost art. In reminiscing, the fans and scribes say there are not so many great base runners now as there were a few years ago. Of course, this is primarily due to the livelier ball, which has placed the balance of power

more in the hands of the hitter than the pitcher. Runs come much easier and oftener now than in former years; consequently, the smaller number of real base runners.

It is necessary for a team, in order to be a contender for honors in any organization, to have definite plans regarding base running for the season. This phase of the game is so important that many games will be won by it if much time is spent on it during the practice, and more games will be lost through it if no time is devoted to it. There is not enough time spent on base running in college ball.

The Base Runner

There are many qualifications that a player must have to be a good base runner. As soon as he becomes a base runner, he must concentrate on things that have to do with base running. Before he becomes a base runner, he should have spent part of his time on the bench, studying the actions of the pitcher. Most college pitchers have some small give-away sign which tells the close observer when he is going to throw to first instead of to the plate. The close observer gets this, and the result is that he will be dangerous on the bases. He knows which of the outfielders has the "Muesel arm" and which one throws weakly and inaccurately. He knows their strength and weaknesses. Other things that determine his action on the bases are the inning, score, outs, count on the hitter, and the hitter.

A great combination for the base runner to possess is smartness and speed. Speed is a fine thing to have, but it is not to be desired over smartness. Alertness is the best kind of speed. The good base runner knows when to take his chances and when to play it safe. In base running, there is no half way mark—he either takes his chance or he does not. Many a real base runner worries the opponent's infield because they know he will take advantage of the least slip. This same runner is "heads up" to all bluff throws from mussed up ground balls which a clever infielder may pull on him.

Execution

The batter becomes a base runner as soon as he hits fairly. College ball players lose too much time in getting out of the box. Time should be spent on teaching them to get away fast. On a few strides from the box, they should be at full speed. The runner should watch the ball just enough to know what happens to it, in order to know whether to round the base or turn to the right. If the ball is fielded by an infielder, he should

run straight down the line to the base, touching the base with the left foot if possible, without throwing the player out of stride, and then slow up gradually in order to prevent pulled muscles, which are often the result when players try to stop quickly. In running out a hit to first, he should not slide unless to avoid a collision. Some players slide to make a close play by stirring up dust, but most of them lose time. It is a mistake to jump toward first because of the danger of injury.

If the ball is hit to the outfield, the base runner when half way down to first will cut outward a few feet, thus enabling him to cut across first base, without losing time. The runner should round first base on all balls hit to the outfield.

After reaching first, the runner should concentrate on base running and forget everything except that. While at first, he should be sure to stand on the base until he knows where the ball is, and until the pitcher gets into his position; he should also stay on the bag until he finds out if anything is on. There is an art in the giving and receiving of signals, and much time should be spent on this department until the players can go through them gracefully and without apparent effort. With the pitcher in position, he should take his lead off first and on the line. It is natural that a bigger lead may be taken on a right hander than on a left handed pitcher. He should take as long a

lead as is safe and watch closely the action of the pitcher and his give-away motion, if any. In taking the lead, he should not jump around and get off balance, because then is when he will get caught. The only man who has an excuse for being caught off first is the man who intends to go down. When caught off flat-footed, he should be sure to go on down to second and not back into a sure out. In sliding back into first, he should slide to the outside.

A base runner should never cut bases purposely, as he will gain nothing by it, but will usually be the loser. He should touch all the bases.

The Steal

The base runner will get his signal and take his lead as described above. The best time to steal second base is with two men out; then a hit will bring in the runner. One out and a good base runner on first, score about even, is also a good time to steal. The base runner should never steal with none out under the same conditions unless the catcher is very weak. In sending a man down on this steal, the score, inning, outs, base runner and hitter must all be considered.

The only time a runner should attempt to steal third is in a double or plain steal, with one out. On the double steal if the man going to third is out, there is still one man in scoring position with a chance to score. On the plain steal off third, the player has a chance to score on an infield hit, sacrifice fly, error, or hit. On this, the player should be able to get a good lead. He should not try with none out or two out.

The runner on third should always play on foul ground to prevent being put out by being hit by a batted ball on fair territory. The runner on third should play carefully because an out at third hurts worse than at any other place. When on third, he should play it safe and with none out, wait for an outfield hit or an error which permits the ball to roll to the outfield. With one out, the runner should go in unless the ball is hit sharply to the pitcher, first or third baseman. With runners on second and third, they should advance on any ground hit ball.

The Double Steal

The double steal is worked with men on first and second bases and with men on first and third. The double steal with men on first and second should be used with one out and in games where the opposing pitcher is going strong. If the man going to third is out, there will still be one man in

(Continued on page 44)



Otto Vogel was graduated from the University of Illinois, where he won his letter in baseball, basketball and football. In 1922 he was chosen for the All-American College Baseball Team.

The Under-Emphasis on Baseball

By John L. Griffith

For the last few years a great deal has been said relative to the over-emphasis on football. This writer has never subscribed to the philosophy of those who are disturbed because the public manifests more interest in football than it does in other school and college departments; it is well known that civilized people from the time of the Greeks have always more noisily acclaimed the winners in athletic events than they have the outstanding scholars, philosophers and artists. Further, he has always felt that, if any subject or department was not attracting the attention which it deserved, more would be accomplished by putting extra sales effort back of the subject in question than by lamenting the fact that the public was interested in something else.

The National Amateur Athletic Federation learned a few years ago that baseball was not growing in popular favor so rapidly as was football, basketball, golf and tennis and consequently decided to do what it could to call attention to the merits and values of amateur baseball and to direct the thought of the nation toward the great American game. To this end the national organizations which compose the Federation have been emphasizing baseball for the last two years more than formerly. The officers of this Federation do not lament the fact that more people played golf, basketball, football and tennis last year than ever before and that more spectators witnessed the team games this winter and last fall than at any other basketball or football season previously. They do regret that amateur baseball has not enjoyed similar prosperity.

College Baseball

Last year there were several meetings of college baseball coaches held where the question of what could be done to increase the popularity of baseball was discussed. This is a movement in the right direction. The men who are primarily interested in baseball must assume the leadership in doing what they can to promote this game. If the men who are coaching baseball in the colleges would see that more promotional effort was placed back of baseball, surprising results will be attained. This winter General Pierce in the president's address to the National Collegiate Athletic Association urged the universities of America to strive this coming

year to do more for baseball. Following is an excerpt from his address:

"Baseball has lost its former great popularity with college students. It seems difficult to explain satisfactorily the reason for this. It may be that the professional has hurt the college game, especially where the two have not been kept separate. Baseball is a fine, distinctive American product, and the colleges should not lose interest in it. A successful effort was made during the past season to reawaken interest in community amateur baseball throughout the United States. The National Amateur Athletic Federation, through one of its members, the American Legion, organized about 6,000 boys' clubs, and held community, state, inter-state, and national championships which aroused great interest and enthusiasm. This was accomplished through proper local leadership and by making the games strictly amateur. Should not the colleges make a concerted effort to revive baseball? To this end it is recommended that a baseball committee be appointed to report on, and, if thought advisable, to prepare college baseball rules, and to recommend to the colleges the action necessary to stimulate the interest in it of their undergraduates."

High School Baseball

As in the colleges so in the high schools baseball has been somewhat neglected for the past few years. However, there are signs at the present that the schools are again going in for baseball on a larger scale than formerly. All that is needed is for those in authority to encourage the playing of the game, to give some leadership and to provide playing fields. As an illustration of what one man can do, Mr. P. F. Neverman, secretary of the Wisconsin High School Athletic Association, has interested the high schools in his state with the result that while in 1925 there were only some eighty high school baseball teams the number was doubled in 1926 and this year he reports that there will be over two hundred Wisconsin state high school baseball teams playing interscholastic games. What has been accomplished in Wisconsin may be duplicated in other states if the men in authority will see to it that more emphasis is placed on our national game.

The American Legion

At the annual convention of the American Legion, held in Omaha in 1925, the delegates voted to recom-

mend to the eleven thousand posts that a program of community athletics be sponsored by each and that special emphasis be placed on baseball teams for boys under seventeen years of age. As a result last year twenty-eight states conducted state and departmental tournaments in baseball, which were participated in by fully six thousand clubs. After the state tournaments were held district and regional tournaments were conducted and the four winning teams met in Philadelphia at the time of the annual convention to play for the Junior World Series championship.

The delegates at the 1926 convention recommended that the Legion continue its program of sponsoring boys' baseball teams and the national commanders and adjutants in a conference held in Indianapolis, December 1, 1926, made the following recommendations:

1. That the so-called regional and junior world series contests between teams representing the various departments be abandoned for 1927.
2. That the junior baseball program be continued as a major activity within the various departments, and that the contests held within the various states be confined to deciding state championship teams.
3. That the age limit of players remain, as at present, not over seventeen years of age on December 31st of the year of playing.
4. That the National Americanism Commission, by publicity to every source, urge the posts to cooperate in the program, impressing posts with the benefit of the program to their individual post, and that a follow-up of such publicity be made by the Commission.
5. That contests between departments adjoining each other be encouraged whenever possible to arrange by the departments concerned.

In addition to the recommendations outlined above, we suggest to all department officers to:

1. Take immediate action to form your department set-up for boys' baseball.
2. Begin competition not earlier than May 15th; close your season not later than August 27th, so as not to conflict with high school athletics or your schools.
3. Allow National Baseball rules to govern all contests.
4. Select cities within your various departments as permanent locations for your state contests or tour-

nements, in order that boys' baseball centers may be developed.

5. Encourage competition between teams in larger centers which may be sponsored or, rather, uniformed and equipped by other civic organizations.

The American Legion, it will be noted, has assumed the responsibility of promoting baseball for boys under seventeen years of age. Wherever the Legion Posts are active in promoting baseball, it is suggested that all who are interested in this campaign have an opportunity to cooperate with the athletic officers in the different Legion Posts.

Y. M. C. A. Baseball

The National Y. M. C. A. with two thousand branches and a large number of trained physical directors is in a strategic position to promote community baseball. Nearly every Y. M. C. A. in the United States has been interested in this work and literally thousands of clubs have been organized through the efforts of the Y. M. C. A. men. Their leagues are for all classes of boys and men in small cities and the larger centers as well. The following letter written by F. W. Ernest, Jr., president of the Sunday School Baseball League of Williamsport, Pa., indicates the type of organization that has been developed:

"This year we had 24 teams divided into three eight team leagues under the one control. The business of running the league is handled by the managers of each Sunday School team, although matters of policy are decided by the board of directors, composed of representative business men of the city who are very much interested in our proposition. The detail of schedules, eligibility of players, etc., is handled by John H. Bower, boys' secretary of the Williamsport Y. M. C. A. Naturally Mr. Bower is the key man to the organization as well as the founder or organizer.

"We feel that our league is doing a lot of good in the city of Williamsport toward promoting good, clean amateur athletics and we are willing at any time to increase the size of our league, or make an additional league, to provide for all of the Sunday Schools that desire to enter.

"Our league is self-supporting, as tags are sold at each game, the spectators donating five or ten cents, or more in some cases, and we usually have a balance of approximately \$500 in the bank, so that we are able to contribute to various welfare work in the city.

"All games are played at 6:00 p. m., five innings being a regulation game.

Our attendance will vary from 50 to 500, and we have had as many as 1,000 at certain important deciding games. All money collected is deposited in the league treasury, and our chief expense is umpire fees. The umpires are paid \$2.50 for each game. The teams furnish their own uniforms and one new ball for each game. None of the teams share in the sale of tags.

"Our league is four years old, starting off the first year with fourteen teams. For balls, uniforms and equipment I would estimate that it costs each Sunday School an average of \$150 per year, which all of them are able to finance. We insist on every team being completely uniformed each game."

Very truly yours,
SUNDAY SCHOOL BASEBALL
LEAGUE, F. W. ERNEST, JR.,
President.

Baseball in the Parks and Playgrounds

The Playground and Recreation Association has entered whole-heartedly into the work of stimulating interest in baseball in the municipal parks and playgrounds of the country. Mr. George E. Dickie, of the national headquarters' staff, has been especially active in encouraging the organization of leagues such as may conform to the work being done by the playground and recreation leaders. The following report of the activities conducted by the Playground and Recreation Association of Minneapolis last year illustrates what can be accomplished by the men who are in charge of organized municipal recreation, especially in the larger cities:

"Our amateur baseball program, operated as a recreation unit of the Recreation Department service of the Board of Park Commissioners, has attained a high grade of efficiency and reached a registration of 152 teams, comprising about twenty-five divisions of play, with an age range of twelve years upwards, and enlisting the co-operation and interest of practically every civic club, fraternal, social, community center, and commercial club in the city. With this wide range of general interest prevailing throughout the city, the Park Board has cooperated splendidly, and we have twenty-five sectional diamonds, and our program will run up into nearly a thousand games during the year, games being played during the week, Saturday and Sunday, with a team registration averaging about sixteen players per team, which will give a playing roster of 2,500 players.

"I also have a very efficient official staff caring for the games, and the

whole program received constant civic endorsement and maximum good will, which is reflected in the tremendous attendance registered at all the games. Between 550,000 and 600,000 people witnessed the games.

"Our baseball program here, as I have stated, has attained a high grade of efficiency. The deportment of the players and their obedience to the rules and regulations, their respect for the game, themselves and the officials, together with their splendid co-operation with the Park Board representation, has brought this game to a very praise-worthy position in the city."

W. H. Fox,
Director of Municipal Athletics.

Home Talent Baseball

A few years ago Mr. Mike Davy of Watertown, Wis., a former baseball player and an ardent enthusiast for the national game, originated the idea of home talent leagues. Mr. Davy had discovered that baseball was not flourishing in his state, quite largely due to the fact that the towns loaded up with imported players and as a result went heavily into debt and the backers eventually had become discouraged and quit the game. Mr. Davy's idea was that if the towns would agree only to use players who lived in the various cities or near by them, that better baseball would be the result. He states that in 1921 there was not a single league outside of organized baseball operating successfully in the state of Wisconsin, while last year there were forty-two leagues in which over eight thousand boys played. Mr. Davy organized the first home talent baseball league in 1922 at Johnson Creek, Wis. This league was called the Jefferson County League and was composed of Lake Mills, Watertown, Fort Atkinson, Waterloo, Jefferson and Johnson Creek. In 1923 the Southern Wisconsin League was organized and in 1926 the Fox River League, the latter showing that home talent baseball is just as popular in the larger cities as it is in the smaller communities. The following suggestions contained in the letter from Mr. Davy are important:

"The outlook for baseball in this community for the coming season looks brighter than ever and with a little promotion will bring out double the number of players than there were a year ago. This same thing is true all over the state. I have advices from different communities, one of them a little town of about 100 souls, which has organized a home talent athletic association and which plans on putting a baseball team into some nearby league this summer.

(Continued on page 42)

Basket Ball Contest Plays

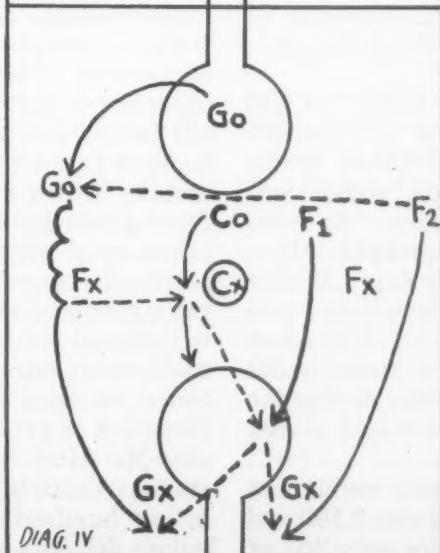
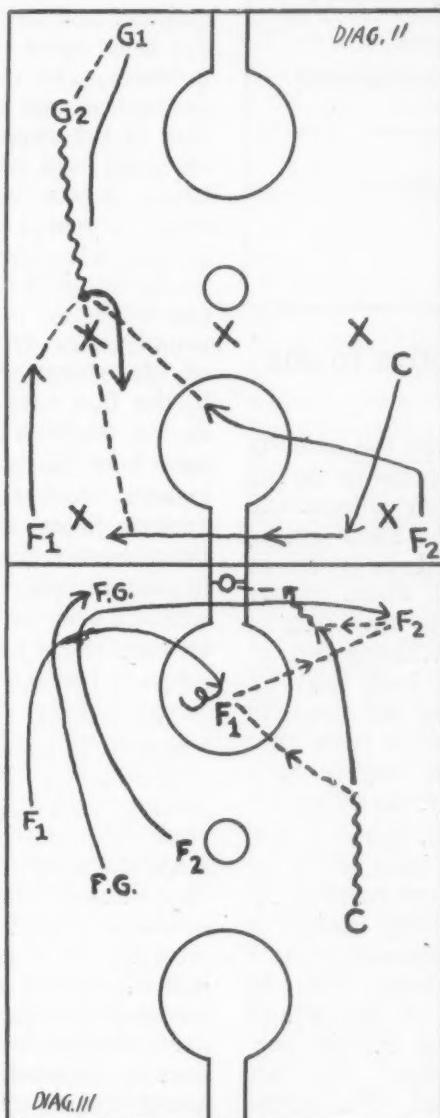
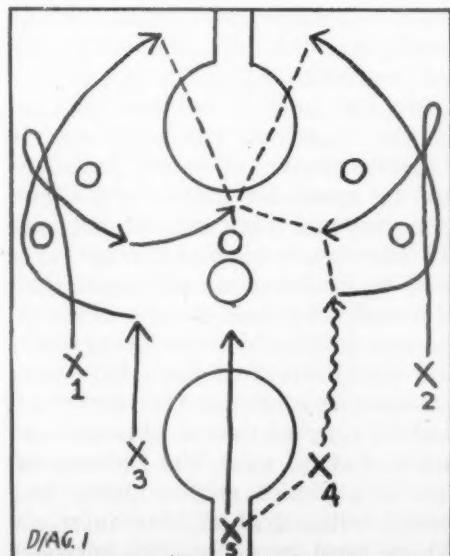
A brief review of high school basketball plays as used in different sections of the country.

Following are five of the plays submitted by JOURNAL subscribers in the play contest. Other selections will appear in the April issue:

Play No. 1 was submitted by Paul M. Marschalk, Pierre, S. D. Back guard 5 puts ball in play by passing it in from out of bounds either to 3 or 4, the center and floor guard respectively. The forwards, 1 and 2, go down into defensive territory and break back to receive the pass from 3 to 4. The ball is passed by dribbling or passing up to the set defense. After the pass is made through the defense 3 and 4 break for the basket as indicated.

Play No. 2 is by G. B. Brite, Lamar, Mo. This is an out of bounds play to be used against the set five man defense. G1 passes the ball to G2, who dribbles to the first line of defense with G1 trailing. As G2 nears the defense F1 runs down the unprotected side line. F2 breaks for the unprotected free throw zone, C for the corner left open by F2. If F2, guard, has followed him, C will be unguarded in the corner and in position to receive a hook pass from G2. If that corner is guarded C goes on under the basket to receive a high floating pass for a tip shot. Other possibilities of this offense will be apparent.

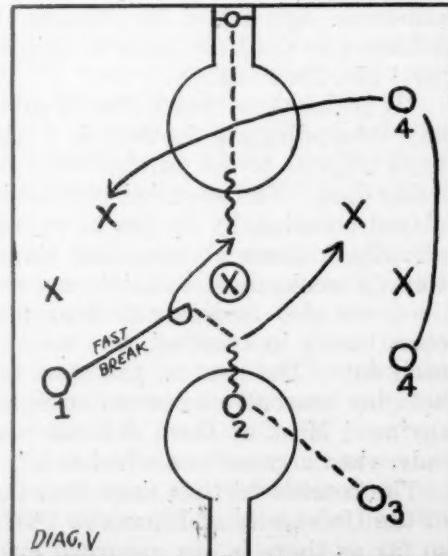
Play 3 is a floor play by Hardy R. Songer, Hillsboro, Ind. The center dribbles down the floor slowly. The two forwards go down on one side



with moderate speed. One goes out fast to the foul line where the center passes to him. At the same time F2 goes out fast into the corner, calls for the ball and fakes a shot. The center, however, rushes in and takes the ball from F2 for a close shot. The floor guard goes on the left side of the floor for the rebound. F1 stops at the foul line for the tip back, F2 goes out to the side for the follow in. If after the center shots he cannot recover for a rebound shot he goes out on the left side of the floor and goes in at the foul circle back of F1.

Play 4 is by H. R. Walker, Hill City, Minn. Forward F2 has the ball out of bounds and can pass to F1, to Co or to running guard Go, but the man out of bounds usually plans to make a long swift pass to guard Go, who comes up to receive it. Go then feints Fx out of position or pivots around him and passes to Go. Fo starts with Co and F2 giving Co three men to pass to under the basket.

Play 5 is by Paul S. Mason, Defiance, Ohio. This is a play to get a man through the first line of a set five man defense. The guard 3 passes the ball to the center 2, who dribbles down the floor and then passes to forward 1 just at the moment of his pivot step, which blocks off the center man of the first line of defense. If the path is clear he may dribble in for a close shot, especially if the forward 4 has cut down and across to block the guard. Center 2 crosses the path of the other guard.



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A Fallacy Regarding Athletics in the Good Old Days

Roger Babson, the famous statistician, has recently been extensively quoted in the public press as saying that the spirit of play is going out of our colleges and that men engage in sports to make the social grade, while sport for sport's sake is gone. He is quoted as having said, "A generation back the whole college engaged in sports. Then we began to specialize in sport. We began to concentrate on winning and today only five percent of the student body play on college teams and only ten percent are interested in any way with actual playing. We must raise that five percent to ninety percent and the way to do it is to get rid of 'big business' athletics in our colleges."

Mr. Babson is a scientific statistician known to all. The JOURNAL has at different times been aided by Mr. Babson's organization in gaining information regarding certain studies which were being made. It is to be doubted, however, that Mr. Babson made a scientific investigation of college athletics when he suggested that a generation ago all of the college students engaged in sports while today only ten percent are interested in playing the games. The fact is, Mr. Babson has his figures reversed. The editor sometime ago asked Mr. George Huff, Director of Athletics at the University of Illinois, about this matter. Mr. Huff replied:

"It so happens that I was in college before we had any intercollegiate football so I have a very definite knowledge as to the number who participated in athletics then. The so-called old-fashioned football was played occasionally by ten to twenty men. By *occasionally* I mean at irregular times, probably three times a week; most certainly not every day. At that time, we also occasionally played baseball and had class teams in baseball, but no one played baseball each day. The men on the class teams probably did not play baseball over seven or eight times during the spring. Most of them did not practice and played only when a game was scheduled."

The records further show that the male enrollment of the University of Illinois in 1897-98 was 1,192 and so far as there is any recorded evidence only 261 of

these men that year engaged in any physical education activity that was deemed important enough to list in the records. Today all of the men students at the University of Illinois are required to engage in some form of physical education activity or athletics from two to five times a week throughout their four undergraduate years. Of course it is not fair to cite the University of Illinois as typical because not all colleges and universities require physical education for four years. The report regarding the number, however, who participated in athletics and games a generation ago at Illinois is undoubtedly a true picture of the situation that existed in most of the universities and colleges. As we grow older we are prone to look back and think of the days when we were in school and to imagine that we played the games more than do the boys of today. The fact is, in those days we had very little equipment and practically no instruction. Such coaching as we had usually came from the town sports who had no idea of the educational values of athletics. Today, due to the fact that our educational institutions believe in the training value of athletics for all, our boys have been fairly well provided with dressing rooms, lockers, shower baths, swimming pools, gymnasiums, athletic fields, and coaches and as a result more of them are learning to play the game and what is more important, play it under proper supervision, which was not true of their father's generation. It is well to keep these things in mind and not to allow ourselves to become pessimistic over present time affairs.

Mr. Babson raises another point in the remarks which he is quoted as having made that is worthy of consideration. The newspapers represent him as suggesting that the way to get ninety percent of our students into athletics is to get rid of "Big business" athletics in our colleges. By "Big business" athletics Mr. Babson undoubtedly means the intercollegiate contests played in the large stadia before large crowds. It is not clear that, if intercollegiate football were given up, the students who are now not interested enough in their own physical training to avail themselves of the opportunities offered by the various intercollegiate and intramural departments, would become more interested because there were no inter-collegiate athletics. Certainly Mr. Babson would not carry his philosophy into the industrial and business world. If he did, we could expect the farmers to demand legislation designed to wipe out the automobile industry because the American people are spending each year a tremendous amount of money for automobiles which might be spent for cotton and other farm products, which this last year did not net satisfactory profits. If this idea is carried farther, this philosophy as applied to business would mean that the manufacturer of a medium priced car would strive to increase his sales and profits by interfering with the manufacture and distribution of his rival's car. Since we have been speaking of the University of Illinois it is pertinent to suggest that at this university Mr. Huff found a way to raise the percent of student participation in athletics not to ninety but to one hundred percent without abolishing intercollegiate athletics. There need be no conflict between

intercollegiate and intramural athletics any more than there need be destructive competition between the farm and big business. When properly administered in each case each may help the other.

Back Seat Drivers

That there are too many people these days trying to drive from the back seat, is a fact to which many married men, as well as those who are conducting the nation's business, will attest. A number of athletic workers throughout the country have found with the growth and popularity of athletics that they too have been given a great deal of unsolicited help and advice by persons riding in the back seats. George Ade once suggested that it has always been a popular pastime for men to sit on the fence and criticize those who were sawing the wood. If we apply this figure of speech again to the athletic situation, it has sometimes, of course, been true that the athletic men, who, theoretically speaking, have been trying to saw wood, were not doing a good job and it may even be granted that at times some of the critics sitting on the fence could have done better if their positions had been reversed. At the same time it goes without saying that the men who are administering athletics in the schools and colleges will in the long run produce the best results if their efforts are not restricted too greatly by those who have only a theoretical knowledge of athletics.

The story is told of a captain of a coastwise vessel who continually quarreled with his engineer. The engineer maintained that the captain's job could be performed satisfactorily by a twelve year old boy and the captain contended that any man who could wield an oil can could do the work of the engineer. As a result these two men decided to settle it one day by changing jobs. After two hours had elapsed, so the story goes, the engineer came up on the bridge covered with oil and said, "It is no use, I cannot make the darn thing go any longer." The captain replied, "Of course you can't because the old ship is ashore." If the athletic men, who may in a sense be likened to the engineer, are not qualified to keep the machinery going, they should be replaced by more competent workmen. It is no more advisable to place athletics into the hands of inexperienced instructors and administrators than it is to entrust a vessel to novice engineers and captains. The concern of the athletic men of the country should be as to how they can improve their efficiency rather than whether they should be entrusted with the responsibility of administering their own departments. On the other hand, far-seeing school principals and university presidents who are not satisfied with the manner in which their athletic departments are being conducted, will discharge the incompetents and replace them with men who are big enough to perform their special duties in a satisfactory manner. They will not make the mistake of believing that, because a man may have been appointed to serve as captain of a ship, it necessarily means that he knows more about machinery than does the engineer.

Improved Athletic Control

President Hopkins of Dartmouth has stated: "Athletics as existent in the colleges today admittedly have their grave weaknesses, their serious faults, and their unfortunate influences. Nevertheless, the history of the past quarter century shows not only an eagerness, but a capacity in the field of athletic control for correcting evils and enhancing virtues, viewed in terms of influence upon ideals of community life among undergraduates, that has not been exceeded in other fields of human activity within or without the college."

It is well to note that a president of a great university believes that the men charged with the responsibility of administering athletics have not only been willing but capable of correcting the evils and of enhancing the virtues in college sports. The reports of the district representatives of the National Collegiate Athletic Association at the last annual meeting indicate that on the whole athletics are continually improving. Professor John C. Adams of Yale University, representative of the first district, states that one of the presidents of his district wrote him, "I have a very definite impression that the general atmosphere surrounding our athletics is demonstrably and steadily improving." Another replied, "In New England athletics, in general, we find a better spirit of sportsmanship than ever before. Never within my memory have New England institutions played their games in so friendly and honorable a spirit as during the last year." Still another president stated, "There seems to be a better understanding between colleges than there was a few years ago, when each new suggestion was approached with suspicion and apprehension." Professor E. L. Mercer of Swarthmore College reported that the colleges and universities of New York, Pennsylvania, New Jersey, Delaware and West Virginia had gone through a year of healthy competition and improved relationships. Dr. S. V. Sanford of the University of Georgia stated in his annual report as representative of the third district that, "Athletics in the third district have been freer this year from real problems than at any time during the history of the Southern Conference."

"More and more colleges in this district take interest in intramural athletics. Nearly every person in our colleges closely associated with athletics believes strongly in the slogan 'Athletics for All.'" Professor Thomas F. Moran stated that, "Athletic affairs in the fourth district have been on the whole in a healthy and wholesome condition during the past year."

This writer believes that athletic conditions in the schools and colleges are continually improving. He also believes that, regarding athletics, we should assume the attitude that we know very little about them. He has a definite conviction that we can use our sports and games in a great many ways not now used. At the same time it will not make for progress if we become panicky, if we allow those who are morbid or pessimistic to influence our thinking, or if we attempt to scrap those things which have been proven good.

Junior High Schools

MANY forces are responsible for the movement for educational reorganization, finding expression in the present widespread establishment of junior high schools. It is partly to be attributed to an appreciation on the part of some of our educational leaders that, as compared to certain European school systems, the entrance upon the period of secondary education in our schools is delayed too long. It was also discovered that beginning at the sixth grade and continuing through the earlier years of the four year high school a high rate of pupil mortality existed. In addition, we must consider that the child at this stage, is rapidly undergoing radical changes in personality and temperament and the one-teacher regimen is entirely incompatible with his evolution. Crowded schools and an inflexible school system are also prominently responsible for the junior high school.

The present reorganization of schools had been considered and discussed as far back as 1893, when the widely influential report of the Committee of Ten on Secondary School Studies was brought before the public. In 1913 the matter was again brought up by the Committee on the Economy of Time in Education. Only a handful of reorganizations took place at this time, under the terms of "junior high school" and "intermediate schools," but at the present date this number has been multiplied until there are more than a thousand junior high schools throughout the United States today. Berkeley, Columbus and Los Angeles, which had junior high schools as early as 1909 and 1910, are generally conceded to be the pioneers in the movement.

Athletic clubs are increasingly finding favor in the social life of the junior high school. These clubs center particularly about the various competitive sports and games. There are basketball clubs for both boys and girls, hiking clubs, outdoor sports clubs and clubs embracing almost all athletic activities. Swimming clubs are formed. All the standard strokes are taught to the members, crawl, backstroke, breaststroke and under water. Junior school pupils are taught diving and racing, and the Red Cross methods of resuscitation. Lectures are given as part of the club program on famous swimmers, news events in the swimming world and other items of interest to swimmers. This club is open to both boys and girls also. The same thoroughness

and interest prevails in the other athletic clubs. For the embryo coach and athletic director there are the Leader Clubs. These clubs train boys to direct organized play and competition.

In the more progressive junior high schools, athletic activities, including plays and games, have in many cases been accorded practically a curricular status. It is not at all unusual to find a full period throughout the week devoted to physical education, with three of the five periods given to more or less informal activity in athletics, such as contests and games, and under the supervision of the director of physical education. They have inter-class games in soccer, track, playground baseball and track and field athletics. Similar series of outdoor competition for girls are also held, with baseball, dodge-ball, basketball and volley ball the most common and most popular.

Careful records in all events are kept, and through a scoring system, boys who show a fair degree of ability may win the school letter. A wholesome spirit of competition is fostered between individuals and classes, and with the individuals own achievements. The administration is informal and encourages the development of initiative and a sense of responsibility.

The trend goes from formal gymnastics toward games, folk dancing and competitive athletics. Formal gymnastics develop a dislike for bodily exercise and rather discourages than fosters the establishment of adult interest in physical education which will tend to offset the evils of modern sedentary life. Competitive athletics encourage voluntary participation in strenuous competition on the part of the student body.

In most junior high schools, ample time is given for routine work, such as tactics, free exercises, apparatus work and ability tests. In addition to this, the teachers make a study of individual cases and give corrective work when necessary. Common defects, such as slight curvature of the spine, round shoulders and flat chests are eradicated, and orthopedic classes for the crippled, nutrition classes and fresh-air groups are formed.

Student Participation in the Physical Education Activities of the Junior High School

*By Luther Van Buskirk, M. A.
The Theory of Student Participation*

In recent years educators have had much to say about educating for ci-

zenship. Schools are undertaking seriously to prepare pupils for positions of responsibility in society. It is evident that education for citizenship should be based on a knowledge of the nature of the society for which it is to prepare. Student participation in school activities seems to be based on this fact. Its justification lies in the fact that society is becoming largely social in its nature.

A generation ago society was largely rural and homogeneous, but today it is rapidly becoming urban and heterogeneous. Changes in commerce and industry have revolutionized the means of getting a living; improvements in the means of transportation and communication have made it possible for people to live where few of the necessities of life are produced. As a result of this, people are now congregated in large cities near industries where work is plentiful. Their supplies of food and clothing can be drawn from the distant parts of the earth.

It is no longer necessary for one to produce all the goods he is to consume, but only some one or two articles in abundance. Society is becoming highly specialized. Each person or small group of people is engaged in producing what it is best adapted to produce and purchases the other articles it needs from other groups. Society is also inter-dependent. This gives us a highly complex organization of groups or societies within the community or nation.

If a man is to fit into such an organization properly and discharge the obligations of a citizen he must be trained for his tasks. Education is the process by which the adjustment can be made. The school that meets these needs must constantly change its courses of study and methods of teaching. School is no longer a place where pupils merely read about life's activities, but it is rapidly becoming a laboratory where they practice the activities they will be called upon to perform in adult life. Some schools have done much more of this type of work than others, but the practice is becoming common.

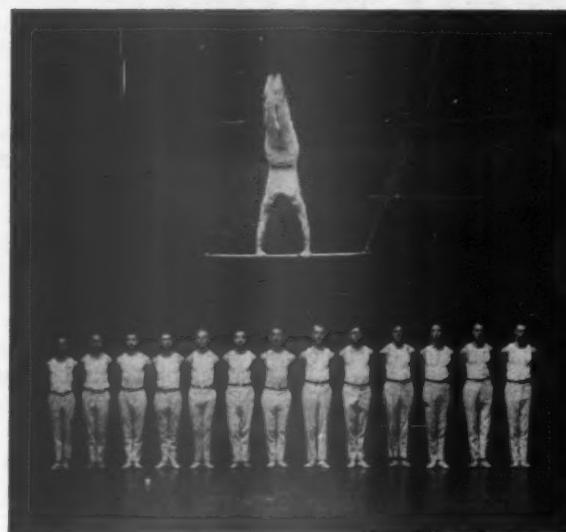
Citizenship is not taught effectively today by maxims and preachments alone, but by giving opportunity for pupils to exercise some of the virtues in school that they will be expected to exemplify when they have gone out into life. The school attempts to confront the pupil with situations similar to those to be encountered in society outside of school. His re-

sponses are noted and corrected until his conduct becomes habitually desirable. For instance, if initiative is desired, the pupil is placed in situations which require the exercise of initiative. If responsibility is sought, the pupil is given tasks to perform, the success of which depends upon his own efforts. Cooperation is secured by setting pupils to work at tasks, the performance of which requires shared efforts.

This calls for life situations in school. These can be provided only by those who know life outside the school. This knowledge of life is now being made available through analyses of social activities. Experts are investigating adult activities in all sorts of situations. Often it is desirable to know why people perform the activities they do, and why we find them performing them in just the manner they do. There are virtues we wish to see people exemplify which are not dominant. It is often necessary to set up ideals to motivate and control activity. So the school has come to employ analyses of both ideals and activities, and so to plan its work as to inculcate these standards in life situations. This is changing the nature of the school to a considerable extent.

Education through activity has become quite common in secondary schools. Many extra-class activities have been added and the regular class meeting has been modified to give opportunity for pupils to do something more than sit at a desk and recite on reading materials. Most such schools have rather comprehensive programs of activities known as the social program and have appointed a special teacher or director of such activities. Teachers often employ student monitors to perform many of the routine activities of the recitation. In fact so much activity has been provided that many people are wondering whether the school has not become a play institution when no really serious work is done. So it seemed to me that in physical education activities where there is considerable freedom from the restraint of the regular class exercise one could find a better example of what could be done with a program of this nature.

From experience as a director of physical education activities it has seemed to me that no other field offers quite the opportunity for such training in citizenship. So the purpose of this investigation was to ascertain just what use junior high schools are making of this means. I chose the junior high school partly because my work at the time was in such an in-



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stitution and partly from a feeling that a relatively new institution in this country would have an opportunity to do more work of an experimental nature than an older institution such as the senior high school.

The Results of the Investigation

Three hundred question blanks were prepared and sent out to junior high schools located in thirty-two states representing every section of the United States. From these inquiries one hundred nineteen replies were received sufficiently complete in detail to be significant for the study. Table I gives the distribution of these returns by states.

It will be noted that California has a substantial lead over other states in replying; Pennsylvania is second with only a slight margin above New York and Michigan. California and Pennsylvania seem to have about one-fifth of the number of junior high schools of the country, but each received the same number of blanks. California leads possibly because physical education is required during these years, but more likely because the climate is more favorable for outdoor play during the whole of the school year. It would seem that the results of this study are trustworthy.

Michigan has more schools of this class than New York so the practice is a little more general in New York than in Michigan. These states seem to employ student leaders rather generally while the remaining ones reporting do not. However, there are a few schools in all the remaining states doing excellent work of this nature. Some have few junior high schools or have instituted the work so recently that it is difficult to make further distinctions that are reliable.

In many respects the most significant part of the report consists of the activities student leaders perform. Often enthusiastic reports of student participation are, upon close study, found to be more apparent than real. Students are permitted to assist with routine duties but not to assume large shares of responsibility in the conducting of the activities. It may be better to begin with only a few such duties and work gradually into the more responsible activities of the program. Students need careful guidance in order that they may not fail in the undertaking and also that they may be advanced as rapidly as they become proficient. From the list of activities reported it would seem that many schools have already advanced a fair distance with such programs. Table II gives in detail the activities student leaders perform in the physical education activities of the junior high school.

It will be noted that the activities most commonly relate to the regular routine of class management. Possibly this is done in order that the director can supervise the work of the leaders rather closely. It is likely that such a plan provides for individual differences in ability. Those who become most proficient can assist the director with those who need more drill.

Leaders officiate at informal games and assist with leagues, meets and contests almost as frequently as with the regular class work. This group of activities gives more freedom and responsibility and shows that pupils are becoming more proficient in di-

recting their own activities. It would seem that the principle of gradual extension of responsibility is followed. More schools are able to do some of the simpler activities with student leaders than many of the more responsible. However, those activities which rank about the middle of the table are difficult enough to challenge the ability of one having considerable experience in directing his fellow students.

Objection is often raised to such a program because of just this fact of placing a large part of the work in the hands of students to be performed. I wonder if there are any who fear that the teacher will be displaced altogether or whether there is fear that work cannot be done well unless a teacher takes full charge and direction of the activities? Possibly the following table will show the general tendency in regard to the matter.

The items in Table III would indicate that schools do not permit students to proceed with such a program without rather close supervision by some member of the faculty. While leaders are given considerable freedom and an opportunity to succeed before their actions are interrupted, the activities have been planned in conference with the director and are likely approved by the department before an attempt is made to present them to the pupils. It would seem that as pupils become proficient enough to require very little supervision in the teaching of the games and athletic sports that the program of activities might be expanded considerably. This is significant if the whole student body is to have some training in physical education. A director cannot handle classes of sufficient magnitude to include all

TABLE I
Rank order of states in number of replies

Rank	State	Frequency
1	California	19 schools
2	Pennsylvania	12 "
3.5	New York	10 "
3.5	Michigan	10 "
5	Illinois	8 "
6	Texas	7 "
7.5	Massachusetts	6 "
7.5	Colorado	6 "
9.5	Kansas	5 "
9.5	Arkansas	5 "
11	Nebraska	4 "
12.5	Connecticut	3 "
12.5	West Virginia	3 "
16.5	Washington	2 "
16.5	South Dakota	2 "
16.5	Oklahoma	2 "
16.5	New Mexico	2 "
16.5	New Jersey	2 "
16.5	Georgia	2 "
23.5	Wyoming	1 school
23.5	Virginia	1 "
23.5	Oregon	1 "
23.5	North Carolina	1 "
23.5	Montana	1 "
23.5	Missouri	1 "
23.5	Kentucky	1 "
23.5	Iowa	1 "
23.5	Arizona	1 "
Total		119 schools

TABLE II
Rank Order of Activities Student Leaders Perform

Rank	Item	Frequency
1.	Assist director with classes as squad leaders.....	97 schools
2.	Have care of equipment and apparatus.....	92 "
3.	Prepare equipment for class and put it away afterward.....	90 "
4.	Officiate at informal games and contests.....	89 "
5.	Assist with inter-class leagues and meets.....	79 "
6.	Assist with ticket sales and advertising materials.....	67 "
7.	Assist in conducting club activities.....	61 "
8.	Assist at fire drills and at passing time.....	60 "
9.	Weigh and measure pupils for competition, health, etc.....	52 "
10.	Manage teams, securing games and officials.....	50 "
11.	Coach inter-class or inter-mural teams.....	43 "
12.	Plan and conduct minor athletic sports.....	42 "
13.5	Look after welfare of pupils during free play periods.....	40 "
13.5	Keep records, charts and graphs showing improvement.....	40 "
15.	Help plan leagues, meets and contests; make schedules.....	37 "
16.	Conduct recreational club activities.....	35 "
17.	Conduct relief or setting-up exercises.....	33 "
18.	Have control of dressing rooms, showers, and the like.....	32 "
19.	Conduct supervised play, teaching the games.....	29 "
20.	Organize a leaders' club for mutual help.....	21 "
21.	Serve on auditing committee, checking up finances.....	16 "
22.	Assist fellows in overcoming physical defects.....	15 "
23.	Make morning health inspection of classrooms.....	8 "
24.	Help plan the general program of activities.....	3 "

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pupils in school unless he does delegate authority to group leaders.

To arrive at a more definite conclusion regarding the purpose of such programs reference should be made to Table IV which gives the objectives in rank order of their importance, that is if frequency of mention

ing that all qualities are equally difficult of attainment.

To ascertain which of the qualities are being developed or secured best, reference should be made to Table V.

By comparing Tables IV and V it will be noted that there is considerable similarity in the rank order of

will supervise the work, and that they should be directed quite closely for a time and supervised at all times. The principle of gradual development seems to be followed.

d. The list of activities performed by leaders furnishes a rather wide range of activity, but more experimentation seems to be necessary before one can definitely select activities most worthy of such a program.

2. Conclusions that seem to require additional evidence to become reliable.

a. The first conclusion that requires more experimentation is related to the testing of results of such a program. Teachers may estimate rather roughly the results being accomplished, but there are no very scientific devices for the measurement of qualities of citizenship or traits of personality. Some of the qualities desirable are listed possibly, but how do we know whether progress toward their realization is being made?

b. The qualities listed may not be the ones most desirable. The study consulted only teachers and directors or principals. Other people concerned such as pupils and citizens of the communities were not given opportunity to express their preference. The principles of scientific curriculum construction should be employed in determining these objectives.

c. We know what activities schools are employing, but more scientific technic should be used to determine accurately which activities have most value.

d. There is entirely too little evidence to justify student participation as the best method of developing social personality. Schools have assumed that it is so, and have undertaken seriously to follow this suggestion. We believe that possibly their assumption is correct, but no one can be sure until more evidence is collected.

As a graduate student of Colorado State Teachers' College, Mr. Van Buskirk made an investigation of the activities which student leaders perform in the Physical Education activities of the junior high schools of the United States. The results of this study are included in the preceding article.—Editor's Note.

Should Football be Played in the Junior High Schools?

By Ferris H. Scott

Director of Physical Education, Julia Lathrop Junior High School, Santa Ana, Calif.

Educators throughout the country have for some time disagreed as to

TABLE III
Methods of Supervising Leaders at Work

Rank	Item	Frequency
1.	A director gives full time to physical education.....	88 schools
2.	The director selects capable students to assist him.....	74 "
3.5	Leaders are given a fair trial to succeed.....	63 "
3.5	Each leader at work is guided by a faculty sponsor.....	63 "
5.	Leaders are utilized to give a broader program.....	59 "
6.	Faculty control grows less as leaders become proficient.....	52 "
7.	The physical director sponsors the leaders' club.....	43 "
8.	Leaders are limited in their activities to definite program or amount of work	38 "
9.	Students, under guidance, select their own leaders.....	30 "
10.	A director gives only part time to physical education.....	29 "

can be taken as a safe criterion. These are for the whole program and those who excel seem to be chosen as leaders.

Health was checked as the most desirable quality and sportsmanship as of next importance. If school work is to proceed as it should, health is fundamental, and sportsmanship in its broader meaning "The Golden Rule" undoubtedly should rank near the head of the list. It may be unsafe to go further in justifying the places given the different qualities, but it is fairly safe to say that the first ten or twelve are the most important ones in the list. Possibly courage should be placed higher, but the terms are not standardized and no two people give the same definitions to the different qualities.

Some think a good course in physical education should accomplish much more than five qualities as was called for. There is no doubt that it should, but it seemed better to concentrate effort on a few qualities at a time. The more important qualities in general should be attempted first, grant-

qualities mentioned. However, there is slight variation as one would expect. Qualities that are most stressed are likely secured in the largest degree and yet some will be developed more easily than others.

Conclusions and Implications

1. Conclusions that seem justified by the evidence furnished in the study.

a. The first conclusion to be drawn from this investigation is that junior high schools in various parts of the country are experimenting with student participation in physical education activities, and seem to be fairly well satisfied with the results attained.

b. The objectives sought are in the nature of qualities of citizenship possibly best expressed as social personality. There is considerable agreement among schools upon about a dozen of these qualities, but not so much as to which are most desirable to attempt after these have been developed.

c. There is good evidence that leaders should be selected by those who

TABLE V

Rank	Order of Qualities Now Being Developed Best by Participation	Frequency
1.	Cooperation	73 schools
2.	Sportsmanship	61 "
3.	Health	54 "
4.	Self-control	33 "
5.	Loyalty	32 "
6.	Initiative	31 "
7.	Clean-mindedness	26 "
8.	Responsibility	24 "
9.	Trustworthiness	15 "
10.	Honesty	13 "
11.5	Courage	12 "
11.5	Courtesy	12 "
13.	Industriousness	11 "
14.	Truthfulness	10 "
15.5	Thoroughness	6 "
15.5	Sociability	6 "
17.5	Orderliness	5 "
17.5	Broadmindedness	5 "
19.	Personal pleasantness	3 "
20.	Originality	2 "

Rank	Order of Qualities of Leadership	Frequency
1.	Health	79 schools
2.	Sportsmanship	61 "
3.	Cooperation	58 "
4.	Clean-mindedness	56 "
5.	Honesty	46 "
6.	Self control	40 "
7.	Initiative	28 "
8.5	Trustworthiness	27 "
8.5	Responsibility	27 "
10.	Loyalty	24 "
11.	Truthfulness	17 "
12.	Courtesy	15 "
13.	Judgment	14 "
14.	Courage	13 "
15.5	Industriousness	9 "
15.5	Service	9 "
17.5	Broadmindedness	8 "
17.5	Dispatch	8 "
19.	Originality	3 "
20.	Tact	2 "

whether or not football should be permitted in the junior high schools. At the beginning of the present season there was considerable agitation as to whether or not there should be interscholastic football in the junior high schools of Santa Ana. Junior high schools in some of the larger cities of California have for some time been forbidden to play football. The indications were that this sport might be eliminated from the junior high school athletic programs here.

It so happened that we were given permission to have a football season. We have played our last game and I am now in a position to base my statements and viewpoints on actual experiences and contacts that I have had with a squad of some thirty junior high school boys for the past two months.

Many arguments have been advanced as to why football should not be played in the junior high schools. It is often said that the average boy at this age is in that particular stage of his development where he is growing very rapidly. A boy's bones at this time are said to be of such texture that they are easily broken and his heart is also said to be easily weakened. Virtually all arguments against football are based on the alleged weakness of the boy of this age.

I sometimes wonder, however, if there are not more hearts strained or weakened during the basketball season than during the football period. Nearly every day I see young boys playing basketball almost to the point of exhaustion. The larger percentage of these boys have had no preliminary training and as a result are straining their hearts far more than if they were participating in a football game for which they were properly trained.

I wish to go on record as believing that there is a place for football in the junior high schools when certain provisions are made and observed. These are the provisions observed by the junior high schools of Santa Ana during the past season. They are that each boy obtain the written consent of his parents; that each boy be given a physical examination by a competent physician; that the playing field be eighty yards long with regulation width and eight yard end zones; that the length of the game be reduced to four eight minute periods, and that not more than seven contests should be played during the season.

I have learned from experience that junior high school boys will play football after school hours and on some vacant lot or even in the street, if this sport is not placed on the athletic



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program. Junior high school boys want to play the same games that the senior high school boys play and they consider it an insult if speedball, soccer, or touch-football is substituted for football.

I believe any fair-minded person will agree with me that these boys are far better off playing football under supervision and with the necessary equipment, than they would be out on a vacant lot without either equipment or supervision. During the past month, two of our boys, whose parents had refused them permission to play football, have broken their arms playing this vacant lot variety of football. On the other hand, my football squad went through the season without suffering from anything more serious than a sprained wrist.

Football is a rough game to a certain extent and it is true that one never can tell when a player will be injured. Although injuries are determined to a large extent by the element of luck, nevertheless, the chances are that a boy will escape injury if he is properly conditioned and if he goes into the game with the right mental attitude. In regard to injuries I believe that our Julia C. Lathrop football squad has gone through the season with a record that few senior high school teams or even college elevens can duplicate. We had to take time out only twice during the whole season and it was never necessary to remove a man from a game because of injuries.

Many persons have an incorrect idea in regard to the size and age of junior high school boys. In a school of average size you will find a number of boys whose school progress has been retarded for some reason and there will also be a few who are reaching adolescence at an early age. These types make the ideal football material for the junior high school. During the season just past I had boys on my squad as old as eighteen years but as a group they averaged about fifteen years of age while in regard to weight I might say that my eleven best men averaged about one hundred and thirty-five pounds.

In our games of the past season we not only opposed other junior high school teams but we managed to hold our own with Class "B" and Class "C" teams from senior high schools. However, a real good Class "B" team is out of the junior high school class while an average good Class "C" team is apt to be outclassed by a junior high school team.

From an educational standpoint I am convinced that football has its

place. In every junior high school the average overgrown boy will not only constitute a discipline problem but he will usually fail to take an interest in his work. I have found that football may be used as a key in changing a boy's viewpoint in regard to his school work. I believe that nearly every boy who played on our team during the past season is at present looking ahead to the day when he will be eligible for the senior high school eleven. They seem to realize that in order to carry out these plans for the future they must first meet today's obligations in the classroom.

There are many persons who will differ with me but I cannot help feeling that football has been worth while in the junior high school if it has done nothing more than to carry over four or five boys into the senior high school or college who otherwise would have dropped by the wayside as far as an education is concerned.

Physical Training in Junior High Schools

By Herbert G. Allphin

Director of Gymnastics and Swimming, University of Kansas

Many junior high schools have been built in this country in the last few years, and at the present time many more are being completed. Most of these schools are installing gymnasiums and swimming pools. The junior high school is generally built to accommodate the seventh, eighth and ninth grades and the average age of the children attending these schools ranges from eleven to fourteen and one-half years. At this time of his life the child is very active and should be given physical exercise in a progressive and systematic way. Physical exercise will not only give the child new life for his other subjects, but it will help him by giving him better health, strength, posture and grace; thereby fitting him for the hard knocks that are destined to come later in life.

In some cities more money is provided for building purposes than in others. It is more convenient, of course, to have the gymnasium separate from the auditorium, but the particular school that I have in mind uses the gymnasium and auditorium together and this plan works out very nicely. There are bleachers on each side of the room that may be taken up or put down easily and the folding chairs that are provided may be placed down the center of the floor. It has been found that these chairs may be put up and taken down in about eight minutes. The apparatus hanging from the ceiling may be

drawn up out of the way and the other paraphernalia such as the mats, bucks, horses, parallel bars and the other usual equipment may be placed in the rear of the gymnasium.

The logical place for the swimming pool and locker rooms is under the gymnasium or directly beside it. Every junior high school having a gymnasium should by all means also have a swimming pool. Swimming is not only a beneficial exercise, but it prepares the child for emergencies that may arise later in life. The approximate number of deaths in the United States from drowning, at the present time, is from 5,000 to 6,000 a year. Even so, the death rate is greatly reduced from that of several years ago, due to the efforts of various life saving societies and also due to the introduction of swimming into the curriculum of schools and universities throughout the country. Since the child learns to swim much more easily when he is young than when he has matured, it is a good plan to start swimming in the junior high school, while he is at the ideal age.

The principal exercises for children of junior school age are running, ring work, jumping and vaulting. It is frequently found, while constructing a school building, that because of financial reasons, it is not possible to equip the gymnasiums with a complete line of apparatus. The first and most important pieces that I would suggest are the climbing poles. Then ropes, climbing ladders, suspended ladders, flying rings, horses, bucks, vaulting boxes, mats, wands and dumbbells may be added. Later, if it is possible to install more apparatus, Indian clubs, stall bars, horizontal bars, traveling rings, a rowing machine and spring boards also should be included.

Every child at the beginning of the school year should be given a thorough physical examination. This examination should include heart test, height and weight, foot inspection and

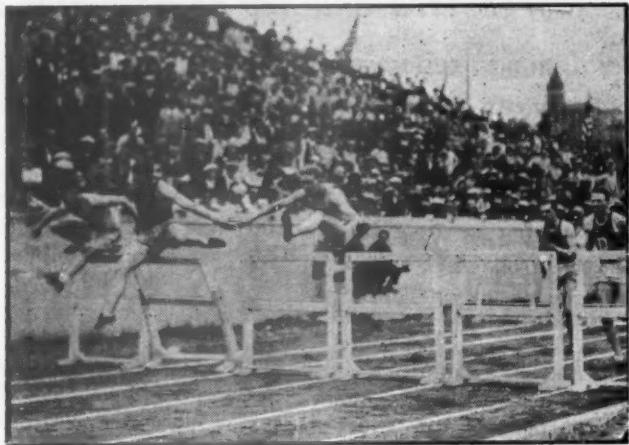
(Continued on page 46)



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News From the State High School Athletic Associations

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Wisconsin

In the October bulletin of the Wisconsin Interscholastic Athletic Association, Secretary Neverman states the problem of the small high school as follows:

"Two hundred sixty-nine Wisconsin high schools have enrollments of less than 140. Many were, no doubt, surprised when this statement appeared in the September Bulletin. To many these figures opened up a definite line of thought while to others they meant but little. The purpose of this short article is to place the situation of the small high school, and surely all with enrollments of less than 140 belong to this class, other than financial, before the principals of the State. The matter to be presented must be thought through sooner or later by the Association if we are to continue a healthy, effective and worth while organization.

"All Wisconsin high schools compete in athletics under exactly the same rules of eligibility. The school of 40 has the same rules of eligibility as the one of 750 or 2,200. Wisconsin Association regulations are as good as the best found in any State and barring a few instances can not be improved. The men who wrote the rules, however, did not understand the problem of the small school and in fixing regulations had clearly in mind the average or large school.

Indiana

Mr. Trester, Permanent Secretary of the Indiana High School Athletic Association, has recently stated that almost every city in Indiana has completed a new gymnasium. He adds:

"Eight new gymnasiums, which are to be completed in Indiana this year attest to the growing popularity of basketball. Vincennes is soon to dedicate a new gym that will seat 6,200 persons. This will be the largest high school building of its kind in the State. The gymnasium, complete in every detail, is being constructed at a cost of \$100,000. The Vincennes Kiwanis Club has provided a pipe organ for the building.

"Gary, Logansport and Bloomington are completing new gymnasiums, each with a seating capacity of 5,000 at approximate costs of \$100,000 each. The

Gary building is a community structure.

"Smaller gymnasiums which are near completion and the seating capacity of each are as follows: Greenfield, 2,500; Scottsburg, 1,000; Fowler, 1,500; and Wabash, 3,000."

Bulletin number four of the Indiana High School Athletic Association states that:

"On and after January 1, 1927, a student, who participates in any interscholastic football, basketball or track contest, shall have on file in the Principal's office a certificate of physical fitness and a certificate giving the written consent of the father, mother or guardian for such athletic participation as is specified therein. The physical examination shall be made during the season of each of the three sports by a regularly licensed physician.

"Previous to the participation, the Principal shall certify to the I. H. S. A. A. that the certificates required in this proposal are on file in his office. Previously parents' consent and physical certificates were not required of high school boys playing basketball, baseball and engaging in track contests but applied only to those who were candidates for the football teams. This was manifestly unfair and it gave the impression that football was an especially hazardous game and consequently unduly frightened many boys and their parents.

Illinois

At a meeting of the officers of the Illinois High School Athletic Association held this fall the following questions regarding the rule prohibiting summer football practice were decided as follows:

"I. When the county teachers' institute is held immediately preceding the opening of the fall semester football practice may be conducted during institute week provided:

1. Practice may not begin before September 1st.
2. The high school teachers are in attendance at the institute and are on pay.
3. Class room work opens immediately following institute.

"II. When for unavoidable causes any school is forced to postpone the opening of the fall semester beyond the

normal time for beginning school in that district football practice may begin at the average normal date for opening the fall semester in that district as determined by the opening dates over a period of several years.

"The following Chicago schools have recently joined the Illinois High School Athletic Association and are thus eligible to compete in games, tournaments, and meets with high schools which are in State Associations that are members of the National Federation of State High School Athletic Associations:

"Nicholas Senn, Lake View, Hyde Park, Carl Schurz, Tilden Technical, Lindblom, Englewood, Crane Technical, Tuley, Austin, Carter Harrison Technical."

Michigan

Mr. A. W. Thompson, State Director of Michigan High School Athletics, has recently suggested the following for rating the officials by schools:

"Every high school is urged to fill out as soon as possible the requests for the rating of athletic officials which it receives. Unnecessary delay in rating the applying official keeps him off the Supplementary or Approved List. Each official who applies fills out an application blank in each sport and lists those schools which have knowledge of his work as an official. Requests for ratings are then sent to each school so listed, and the ratings given are entered on the rating blank filed in this office for each applying official. Unnecessary delay in return of the rating blanks, of course holds up the publication of these officials' ratings. Every effort should be made to rate officials promptly, correctly, and impartially.

"New names are being added to the general list of applying officials continuously. The list will be of greatest value when it is so large that schools have a considerable choice of officials. At present the number is not large enough. Superintendents, principals, and athletic directors are urged to interest capable men in their own localities in making application for rating. It has been suggested that for next year every official used in a high school contest must at least be registered with the State Association. We would then have three lists

of officials: General, Supplementary, and Approved. This point will undoubtedly be discussed either by the General Assembly or the Representative Council in December."

Ohio

The Ohio High School Athletic Association has ruled as follows relative to participation in independent meets:

"So many complaints were received last year from superintendents and principals because of the many independent meets and tournaments participated in by high school boys and girls that it has been thought best to take some action towards curtailing them. Last year independent basketball tournaments were held by newspapers, private individuals, National Guard Companies, Y. M. C. A.'s, high schools, colleges, lodges, etc. In several of these tournaments many of the teams played four games per day. One high school team played in five different tournaments in addition to some twenty-five scheduled games. The Board of Control, therefore, passed the following regulation at the Cedar Point meeting:

"A member of the Ohio High School Athletic Association may not take part in any meet or tournament not sanctioned by the Board of Control, except those approved by the National Federation of State High School Athletic Associations."

Texas

Roy B. Henderson, Athletic Director of the Interscholastic League of Texas on October 21st sent out Circular Number Three with the following warning:

"One of the most obvious criticisms that can be made of high school football in Texas today is that too many coaches overwork their boys. The harm is not done in playing a game once every seven days. In many cases the day of the game is the lightest day of the week from the standpoint of the workout. The damage is done by the coach who, in his eagerness to win his district championship, puts his boys through a long, daily, gruelling practice, losing sight entirely of the fact that he is doing the very thing that hurts his chances most.

"This proper training of a high school football squad is a science. It should not be entrusted to one incapable of dealing with the many problems that arise, or to one who will sacrifice the physical interests of the boys in his efforts to turn out a winner. It has been my observation that the most successful coaches are those who bring their boys along slowly, never forcing them through a daily grind that leaves them physically and

(Continued on page 46)

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is often in the training quarters, by efficient treatment of incidental injuries received in training or during a contest.

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PART I

Measuring General Athletic Ability

A. The Need for a Measure of Athletic Ability in Competitive Sport.

IN a dynamic society the primary function of measurement is prediction. The automobile engineer measures the power of his motor to predict how fast it will move the chassis, and the weight of the chassis to predict the motor power which must be installed to move it at a given speed. In industry more and more accurate measurement is everywhere a keynote of progress. Even in education measurement is coming to the fore. We measure the intelligence of a child to predict the type of life-work, for which he is fitted, and we measure his learning at intervals to predict where and when he will "arrive".

In the field of physical education measurement has lagged somewhat. The time has arrived, however, when coaches especially need a measure of athletic ability to determine where to give their attention. They are providing for high school and college men an expensive and highly technical training, which can be used advantageously by only a relatively few individuals. Whether the training be given for the purpose of producing performers for the multitude, or to prepare young men to become in their turn coaches and physical directors, or whether it be to improve character—moral or cultural (and there are inherent in interschool cooperation in athletic sports real and valuable opportunities for this kind of training), these are problems of policy beyond the scope of this paper.

However, no one today requires college dramatic or debating coaches to spend time on unworthy material. Colleges of engineering, law, and medicine unhesitatingly deny their benefits to applicants who cannot successfully use the training they provide. The athletic coach—like the dramatic coach or the professor of bacteriology—must be recognized as a specialist, who provides for worthy individuals an intense form of training. He should no more be handicapped in his work, and those doomed to failure should no more be permitted to experiment in failure, than should teachers and students in other specialized fields.

Intramural sports should be provided for the athletic novices.

Coaching service and interschool cooperation in sport are properly reserved for those who cannot find competition on their own level in their own school.

The *Athletic Index*, explained and defended hereafter, is designed to predict success in competitive sport. Thus, its use is to discover potential athletes—those who are most worthy of the attention of the coach. Like other measures it will sometimes fail. It is most useful in predicting potential football, boxing, rowing, swimming, track and field ability, and to a slightly smaller degree potential ability in baseball and basketball. At present coaches use, almost exclusively, that archaic method of discovering athletes, snap judgment—a blow-of-the-eye method.

The *Athletic Index* is a score computed from several easily administered physical and mental tests, combined into a single rating which indicates the relative ability of the boy or man tested. To understand its significances would be impossible without knowing more than can be told in a paragraph. Therefore its component parts are explained in detail in succeeding sections. It should be interesting to know at this point that all tests can be completed by any single individual tested in forty-five minutes while a single competent adult, with the aid of half-a-dozen student assistants can run men through all the tests at the rate of one man per minute.

Moreover, the tests may be administered as an integral part of the annual physical examination for all students. Since the tests have other uses besides measuring athletic ability—which will be of value in the physical education program—there should be no difficulty in securing the cooperation of all necessary agencies in completing them.

The *Athletic Index* is directly derived from three other indices—the *Strength Index*, the *Physical Fitness Index*, and the *Intelligence Quotient* or index of brightness. These will be explained in the order named.

B. The Strength Index—A Measure of General Athletic Ability

In 1911 the writer observed, at the Phillips Exeter Academy, that boys who made the highest scores in the "Harvard Strength Test" were usually the best athletes. In 1920-1923, as a high school physical director and

coach he was able to discover athletes (and was materially assisted thereby in winning several league championships) by the use of certain physical capacity tests. During 1923-1925 he experimented with these tests, finally developing the *Strength Index*, and was able to prove conclusively in his Ph. D. dissertation that it measured general athletic ability with a high degree of accuracy. The construction and description of this index, together with the proofs of its value constitute the material of this section.

The reader is perhaps aware of a widespread opinion that brute physical strength bears but very little relation to efficiency in games. However, like the conception of a flat world, this impression, which is probably traceable to a desire to exalt the moral and intellectual virtues of certain forms of large-muscle activity, is absolutely false. Even a sleight-of-hand performer will be found to have very powerful forearm muscles, and the manual strength of piano players is well-known.

Neuro-muscular skill and the strength of the muscles involved always bear a close relation to each other. Measure one and we can predict the other—though we may not be able to predict the exact form of skill indicated by a strength measurement.

Since general athletic ability means ability to engage successfully in many athletic activities, and since these involve most of the large muscle groups, general athletic ability should be predictable from tests of the strength of the large muscles.

However, tests of the strength of all large muscles are unnecessary, since the strength of one set cannot easily be increased without increasing the strength of others. If we measure a few representative groups we may safely ignore the others, as offering but little not included in those measured.

C. Proofs That Strength Tests Predict Athletic Ability

General athletic ability may be measured in two ways—by making careful tests of necessary fundamental abilities, such as speed of running, jumping, vaulting, throwing balls accurately, etc., or by assuming that those who succeed in "making the team" are athletes. Of these, the former is more accurate, the latter perhaps more convincing to the average coach. The writer used both methods in obtaining his proofs.

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The athletic ability of two large groups of high school boys was measured by running them through representative athletic tests—running the 100 yard dash, high jumping, broad jumping, bar vaulting, putting the eight pound shot, and throwing baseballs, footballs, and basketballs at targets and goals. Composite ratings were calculated from scores from these tests. These ratings indicated in points the athletic ability of each boy, as 1251 points, 905 points, etc. These scores were then correlated, by statistical procedure, with strength test scores, measuring the strength of forearms, upper-arms, legs, back, shoulder, girdle muscles, and lung capacity to discover to what extent the strength scores agreed with the athletic ability scored.

The method of comparison used was that of "correlation" using the "Pearson product-moment", and "correlation-ratio" formulae, which are of much greater significance than averages. "Predictive Indices" were computed, too, as these are more useful in comparisons than are correlation coefficients.

Statements of absolute measures are not nearly so significant as of relative measures. Therefore the chief method of proof was to compare the correlations between athletic ability and strength with correlations between athletic ability and age, height, weight, and combinations of these measures.

Certainly the older boy is usually a better athlete, as is the heavier boy, the taller boy and the boy more advanced in grade. The first sizing-up of a potential athlete is to "look him over" for evidences of athletic prowess—age and size!

Table I
Correlation and Predictus Indices:
Athletic Ability With Physical
Measures.

Athletic Index with "rho"	P.I.
Age .....	.50
Height .....	.50
Weight .....	.51
Lung capacity .....	.59
Right grip .....	.68
Left grip .....	.68
Back lift .....	.66
Leg lift .....	.64
Arm strength.....	.75
	.34

Table II
Correlations and Predictive Indices: Athletic Ability With Combinations of Measures.

Athletic Index with	"rho"	P.I.	"eta"
Age, height and weight.....	.62	.215	.72
Age, height, weight and grade (a practical plan).....	.60	.20	.70
Strength tests combined into a Strength Index.....	.81	.414	.84

The reader who is familiar with statistical technique will easily appreciate the superiority of strength tests over age, height, and weight by glancing over the data reported in Table I.

The man who is unfamiliar with statistical procedure will be more interested in the following analysis:

1. Lung capacity predicts general athletic ability with 50 per cent greater accuracy than does either age, height, or weight.
2. The strength of grip of either hand is twice as accurate as age, height or weight, etc.
3. The strength of arms (measured by the proper formula) is two and one-half times as accurate as age, height or weight in predicting general athletic ability.

This means that if one coach should line up a group of athletes according to their weight and say "X weighs 100 pounds; he is a poor candidate; Y weighs 120 pounds; he is a little better; Z weighs 140 pounds; he is possible; A weighs 160 pounds; he is a likely candidate"—this coach would involve himself in two and one-half times the errors of judgment of another coach who followed the same procedure, but used the strength of arms (properly measured) as his criterion.

Now age, height, and weight measure different qualities. Perhaps some combination of these will yield a prediction of athletic ability which is superior to predictions from strength tests. The statistical technique of "multiple-correlation" is useful in predicting what might be achieved if a group of tests were combined in the best possible fashion. The findings are given in Table II. Correlation ratios, are given also, since curvilinearity is pronounced.

The interpretations of these findings are:

1. If the scores from age, height and weight be combined into the best possible index, strength of arms is still fifty per cent more accurate in predicting general athletic ability.
2. The Strength Index (as finally computed, which is, of course, a composite score from several physical capacity tests) is twice as accurate as a certain practical combination of age, height,

weight, and grade in school, or nearly *three times* as accurate as weight alone.

Even today we judge ability by weight. But actually weight which does not measure the size of muscles in good tone is a negative handicap. The *Strength Index* measures accurately the useful weight, together with its state of usefulness.

(A)

3. Analysis of "scattergrams" from which correlation coefficients were calculated indicates that the curvilinearity of data distribution masks much of the true correlation between the Strength Index and athletic ability. This may be noted also by the differences between correlation coefficients and correlation ratios.

Therefore the achieved "correlation ratios" between athletic ability and the Strength Index should be accepted as more valid than product-moment coefficients. These run as high as +.85. This means that it has been conclusively demonstrated that *nearly half of the elements which go to make up ability to run, jump, vault, etc., depend on strength* (or on some factors which strength test scores predict).

But all experimental measures are inaccurate and inevitably tend to discount the true relation between strength and general athletic ability. The athletic tests especially were incomplete in number, they were not measured accurately, etc. It is of great significance that *the accuracy of the Strength Index in predicting athletic ability rises as new athletic tests are added to the battery measuring athletic ability directly. Probably, then the Strength Index alone measures nearly two-thirds of the elements which go to determine ability to run fast, jump high or far, vault, etc.*

The sceptic should know that tests and comparisons were made on a group of 210 boys for one series of comparisons and on 136 boys—a new group, using different tests, six months later—for a second series of comparisons. The results from both series were almost identical, and the "probable errors" are insignificant.

Those not familiar with the statistical method of correlation will appreciate a report of comparisons of Strength Indices between those who won the school insignia and the group of Sophomores, Juniors and Seniors from whom they were selected (a group of 390 boys including the athletes).

1. The average Strength Index of



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- all successful athletes, was not reached by ninety per cent of the large groups.
2. Ten football players achieved Strength Indices higher than 371 of the 390 boys in grades ten, eleven, twelve—including themselves. There were in other words, only nineteen boys in schools who achieved Strength Indices above 2,233 points and of these only nine were not among the best football players in school. (These nine represent lost opportunities for the coach!)
 3. The "five best athletes in school" (as designated by their coaches) achieved Strength Indices not reached by ninety-seven per cent of all boys in the three upper

grades—including themselves.

4. The average Strength Indices of the four major sport captains was not equalled by ninety-seven per cent of all boys in the three upper grades, including themselves.

Table III is a summary of these findings:

It is impossible to go into the details of the proofs enumerated above. It should be sufficient to report that the most competent mathematicians and experimenters will find nothing important to question in the statistical or experimental procedures. The facts reported above may be relied on to be true, and to hold anywhere for boys and men between 11 and 21 years of age at least.

Table III

Strength Indices of Certain Groups.

(From a High School With a State Championship in Track and Field, and Unusually Successful Football and Basketball Teams.)

Group	Cases	Median	90	95
		S. I.	Percentile	Percentile
1. Football	20	2261	....	....
2. Basketball	10	2016	....	....
3. Baseball	9	2022	....	....
4. Track and Field.....	15	2195	....	....
5. (1, 2, 3, 4, above)	36	2123	....	....
6. Two or more sports.....	14	2123	....	....
7. Five best athletes.....	5	2353	....	....
8. Captains	4	2354	....	....
9. All Sophomores, Juniors and Seniors	390	1507	2106	2233

Table IV

Correlations: Arm Strength Formulae With Athletic Ability

Formulae (P = pull-ups, D = dips)		r	P.I.	"eta"
Wt	Ht-3			
1. (P + D) $(\frac{10}{—} + \frac{2}{—})$ .....	.686	.273	.75	
Wt				
2. (P + D) $(\frac{10}{—})$ .....	.718	.304	.77	
Wt				
3. (P + D) $(\frac{10}{—} + \frac{3}{—})$ .....	.713	.299	.80	
Wt	Ht-65			
4. (P + D) $(\frac{10}{—} + \frac{2}{—})$ .....	.738	.325	.83	
Wt				
5. (P + D) $(\frac{10}{—} + Ht-65)$ .....	.734	.321	.82	
Wt				
6. (P + D) $(\frac{10}{—} + Ht-70)$ .....	.530	.152	.80	
Wt				
7. (P + D) $(\frac{10}{—} + \frac{50}{—})$ .....	.703	.289	.82	
Wt				
8. (P + D) $(\frac{10}{—} + Ht-60)$ .....	.739	.326	.810	
Wt				
9. (P + D) $(\frac{10}{—} + \frac{60}{—})$ .....	.746	.333	.806	

D—*Make Up of the Strength Index.*

As has been indicated above, the Strength Index is a score calculated from records from seven physical capacity tests, including lung capacity, strength of right forearm (grip strength) strength of left forearm, strength of back, strength of legs, strength of upper arms and shoulder girdle muscles in extension and downward rotation, and strength of upper arms in contraction and upward rotation. The added total of scores from these tests is the Strength Index. Tests must be made using standard instruments (costing, exclusive of weighing scales, less than three good football uniforms) and in proper order.

Computation of the Strength Index (determined after extensive analysis and experimentation) is as follows: (Tests should be given in the order named, with a five-minute rest between pushings and pullings. All tests should be given each individual in from 10 to 12 minutes.)

1. Lung capacity (use the best record from two tests in cubic inches), *plus*.
2. Right-hand grip (use the best record from two tests, taken alternately with the left-hand test) in pounds, *plus*.
3. Left-hand grip (use the best record from two tests, taken alternately with the right-hand grip) in pounds, *plus*.
4. Back-lift, in pounds (re-test for cause only) *plus*.
5. Leg lift, in pounds (re-test for cause only) *plus*.
6. Push-ups on the parallel bars—number of (counting one-half for every lift not completed). The total number is multiplied by $\frac{1}{10}$ Weight plus Height—60) *plus*.
7. Pull-ups—chinning on rings—number of (counting one-half for every lift not completed). The final score is multiplied by $\frac{1}{10}$ Weight plus Height—60).

Add all scores. The total is the Strength Index.

Of all the problems involved in developing the Strength Index the most interesting and important was that of scoring the strength of upper arm and shoulder girdle muscle groups. It was interesting because it demanded special treatment and was important because the strength of these muscles is easily the most valid measure of general athletic ability.

As indicated above, chinning and dipping (pull-ups and push-ups) are counted, and multiplied by a certain factor determined by height and weight. This is done because the strength required to raise a heavy weight is greater than that required to lift a light weight; likewise, the taller individual lifts the weight farther.

The final solution was to try out several formulae to determine the most efficient method. The reader should observe especially the high correlation-ratios achieved by these formulae between "arm strength" and athletic ability. Table IV gives the results:

To allay fears concerning the difficulty of scoring, it should be reported that all scoring can be completed by the average high school Senior in from 15-25 seconds for each S. I. calculated, when the proper form for recording test results is used.

This is the Strength Index. Not all boys earning high S. I.'s will be athletes and some few athletes will be found who achieve fairly low S. I.'s. The S. I. is not infallible, but it should be observed here (and will be discussed later) that the boy who earns a high S. I. and who does not succeed in athletics has something the matter with his brain, his heart, or his character.

Experienced coaches have, during their reading of this section been remembering examples which tend to refute the statements made. Two explanations are given here.

First, are these coaches not thinking of the exceptions, which, *standing out from the normal situation*, tend to prove the rule that strength and athletic ability go together?

Second, it is apparent that the Strength Index is, primarily a measure of physical capacity. It is not a measure of endurance. It is not a measure of intelligence. It is not a measure of those three most essential qualities of character in an athlete—an inner spirit of co-operation, courage, and perseverance. Thus the Strength Index is incomplete as a prediction of ability in competitive team games.

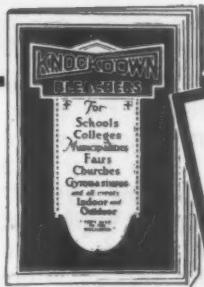
For most purposes the S. I. is adequate as a measure of general athletic ability. Coaches will make few mistakes in pinning their faith on men who earn high S. I.'s. But for the rigorous requirements of inter-school competition a more complete measure is desirable. The Athletic Index, which predicts most of these other qualities is described in Part II.

(To be continued in April)

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Reports From the New York Meetings

A Reply to Dean Wilkin's Report on Intercollegiate Football

By Dean S. V. Sanford

University of Georgia

(Continued from February)

A coach is a good business man and a good judge of the ability of a player. Except under rare conditions, a coach would never use a player until he reached his senior year. A coach realizes that the longer a student plays on the squad and the longer he remains under his instructions, the greater asset will he be to the team. Seldom would occasion arise for a coach to use a player until he had received the maximum training and that would be during his senior year. To wait until his senior year to play on the varsity team would in no way lessen the interest of the type of man who now constitutes the personnel of the college team.

Dr. Fauver's plan would increase the number of students actually participating in intercollegiate contests, but it would not have the desired effect of interfering with the academic work of the student for only one of four years and it would not furnish the men, as it was thought, for aiding in intramural sports. This plan would not lessen the publicity which is now given those brilliant stars. Let us not get it into our heads that we can outwit the bright, wide-awake, ambitious sporting writers.

Is it bad for the player to be the center of so much publicity? The close observer knows the great majority of players. They are modest, gentlemanly players. The whole spirit of the game tends towards the development of self-effacement. The weak ones drop out; the strong ones remain. If prominence resulting from hard, earnest effort spoils the boy, let us abolish the oratorical contest, the scholarship prizes, all rewards for achievement which result in distinction. There is too great a tendency to overlook the value of physical excellence.

In passing let me add that Dr. Fauver's plan is along the line we have acted during the past fifty years. Long ago a player could take part in contests as long as he was in college. Later he was limited to five years, then to four, and now to three. Per-

haps the next step will be to permit students to play only two years.

The Wesleyan Parley plan limits the number of games to four played on successive week-ends. It is argued that this plan will eliminate national and sectional championships, because many teams would remain undefeated instead of few. It is not necessary to have a schedule of only four games in order to eliminate so-called championships. And championships cannot be eliminated in this way; for example, the recent "Big Three" championship was based upon only two games, and various state championships require less than four games. "Championships can be eliminated only by the effectively expressed attitude of the colleges. This attitude can and should be effectively expressed in properly arranged schedules, in public statements, and in many other ways. A four-game schedule might aggravate the malady, or it might kill the patient. It would not cure him."

On the question of championships, Dr. W. D. Hooper, recent president of the Association of Colleges and Secondary Schools of the Southern States, said: "My own observation, which has extended over thirty-five years, leads me to believe that the fever of interest is steadily abating; it seems to me that students are taking the games much less seriously, and that a defeat is much less tragic than it was formerly. The chief complaint of this report is one of recent growth, and all sensible people must realize that it is idle to speak of champions in a sport where there is such an element of chance, and where teams are met but once in a season. The sport writers must earn their salaries, and it seems silly for professors to take them so seriously. It is well enough for undergraduates to riot if their team is denied a championship, but older people may well view the matter with equanimity."

The Wesleyan Parley plan states that the necessity for early practice and for spring practice would be done away with. This may or may not be for the best interest of the students. This plan, unlike the Fauver plan, greatly reduces the number of players taking part in intercollegiate football. Decreasing the number of games to four would have one immediate result in the majority of colleges—cutting down the number of men on the squad and eliminating spring

practice period. This policy would be harmful from the standpoint of providing athletic exercise and play for as large a number of students as possible. Coaches would concentrate on a few highly specialized students, as fifteen or eighteen could play a four game schedule. At the University of Georgia, for example, the impetus for large freshman and varsity squads, and for unusually large spring training classes, comes from the policy of using as many men as possible in nine intercollegiate games. We must use about forty men in our intercollegiate games every year, partly from policy and partly from necessity. With four games on our schedule we could easily get along with eighteen men, while only a small number of promising prospects would report for freshman football classes, and at least twelve per cent of our student body would be discouraged from reporting for football at some season of the year, as they do now. One of the just criticisms of football today is that too few men are benefited by participation. The adoption of the Wesleyan Parley plan would not only strengthen this criticism, but actually bring about just cause for it.

There is no doubt that spring practice in many institutions is carried to an excess just as is the case with early or pre-season practice. Such practices tend to make football a grind and not a sport. However, if they desire to do so, the colleges can eliminate such undesirable practices as early season practice and over-emphasized coaching. It seems wise to have spring practice to teach the game not only to varsity candidates but also to many students who wish to know something of the game.

Who can say that there would not be greater total interest in four games than in eight games? "At this point," says Dr. Hooper of the University of Georgia, "is the inconsistency of this report: if eight games cause too much notoriety, four games will cause half as much. The report uses the sentence—'The crescendo of interest extending over eight games would be limited to four games.' I am no musician, but this seems to me a most unhappy figure of speech; if the crescendo were limited it would become crescendissimo, if there be such a word. In short, it seems to me the panacea recommended would be not merely futile, but would actually increase the evil complained of."

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The Wesleyan Parley plan argues that "college teams playing in their own class and vicinity would minimize the commercial aspect of schedule making and that no small colleges would be called upon to sacrifice themselves in order to make money for their institutions—as at present." Those who say that intersectional games are for commercial purposes are, of course, ignorant of the facts. Virginia, Maryland, Tulane, Vanderbilt, Georgia never played Harvard, Yale, Chicago, Princeton, Michigan, Dartmouth for money. On the contrary there is great educational value in these games. The intersectional games have brought the sections into closer relations. I know of no experience more delightful and more beneficial than the intersectional games the University of Georgia has had with Harvard, Yale, Chicago and Dartmouth. They have made the students realize their own obligations to their own institutions. It is folly to think these games influence in any way the financial side of schedule making. Again, I do not think football players need the sympathy of any one because they are called on to sacrifice themselves. They enjoy the contests, the struggles, and are eager for real and frequent contests.

The Wesleyan Parley plan further advocates that "coaches be not allowed to sit on the players' bench during the game, but that captains alone direct their teams." Mr. Dan McGugin of Vanderbilt University, Nestor of college coaches in the South, and one of the best known men in the profession, says: "Coaches would not mind leaving the bench during the game, if the rule applied to all. If the coach is fit to teach all other days, he should be near the players' bench during the game. My judgment is that these criticisms in the main arise out of ignorance, prejudice and jealousy. So many men have scholarship possessions to the extent that the fount of inspiration has dried up. They do not live on year after year in the minds and hearts of their students. If they would give to their students the same earnestness and the very best qualities of mind and heart in the same measure that these are poured out by most of the coaches, there would be fewer vacant seats when lectures are given on the construction of the flicker's nest or on the chemistry of the wampus."

Coach H. J. Stegeman, a member of the National Football Rules Committee and a former student of Coach Stagg, has this to say: "The value to the playing technique of a team or to

the tactics used by a team of the presence of the coach on the players' bench has always been greatly over-emphasized. The almost universal application of standard coaching ethics has practically eliminated objectional methods resulting from his presence—a fact recognized by the National Football Rules Committee. I find that the closer contact a good coach has with his men, the more closely do the men follow his principles of fair play and the more concretely are the recognized benefits of the game assimilated by the players. If the lessons of discipline, of subordination of the individual for a larger group, of control over certain doubtful instincts of inspiration for extreme effort, are as worth while as we have been lead to believe them to be, then the opportunities for applying these lessons should not be lessened. The removal of the coach during the game, the critical period of the season, would certainly lessen these opportunities."

Every college man will readily admit that there are evils connected with intercollegiate athletics that should be corrected at once and can be corrected. I am of the opinion that the evils enumerated in the report of Dean Wilkins are not the evils that need our attention at this time. In fact I am certain that the evils pointed out in his report are in large measure not chargeable to intercollegiate football or intercollegiate athletics. It is within the power of individual colleges and associations of colleges to correct abuses in intercollegiate athletics. In December the Association of Colleges and Secondary Schools of the Southern States committed itself to this principle: "We believe, therefore, that the commissions regulating the standing of schools and colleges ought with increasing care to ascertain the practice of all our institutions, and to make lax regulation of these matters the basis of rejection or ejection as is provided in our constitution.

In conclusion, if the function of a modern university is to meet the demands of the age it serves, then we must do all we can to promote physical training and competitive sports. Athletic sports are too valuable an asset to be overlooked. "It is not surprising," says President Hopkins of Dartmouth, "in a country where we strive to make men temperate by legislation, industrious by court decrees and happy by political oratory, that we should assume our ability to make scholars by denying them the opportunity for indulging in any other interest. But arguing from analogy,



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we lack certainty that this would be the inevitable outcome."

Dr. W. D. Funkhouser, dean of Graduate School, University of Kentucky, says: "It might be well to question, however, whether football is not the manifestation rather than the cause of the much criticized spirit of the times. Football today is the outlet of the pent up energy of youth which was manifested a decade or two ago on the college campus in the riots, rushes, class 'scraps' and vandalism which are now practically things of the past. It represents more than any other college sport the American spirit as manifested in the desire to win, the love of the spectacular and the instinct of 'howling with the pack.' To cripple football or to attempt to reform it will not in anyway change these tendencies on the part of American youth."

Long ago Pindar, the brilliant Greek poet, in discussing athletics, made the statement that two moral elements enter into games. Some of us have not yet recognized the moral elements in athletics, but those moral elements are there. Pindar calls them by the homely names—toil and expense. They are moral elements because they involve self-sacrifice, submission to authority, and devotion to the public welfare. "So run that we may obtain" is not merely an illustration, it is a lesson. Whether it be fleetness of foot or swiftness of horse, it demands the renunciation of self-will. There is no force in college that can be used for a higher and a nobler purpose than intercollegiate football and intercollegiate sports in general.

The Under Emphasis on Baseball

(Continued from page 18)

"What the boys want is encouragement and advice to go ahead and organize teams. There are plenty of leaders among the boys themselves, if they are helped to make a start. Just find them, encourage them and they will not only keep the national game alive, but will constantly increase its devotees. Every new player and his dad, brother, sister and mother are all new baseball fans. The high schools of our state have coaches for almost all athletics, and some way must be worked out to get coaches for those boys who cannot go through high school or after they have left high school, and I feel that the time is not far distant when this is what will be done. A boy who is interested actively in baseball or any other sport is a good boy morally and physically,

and this is what every one wants our future citizens to be—*real men*."

MIKE DAVY.

Baseball Leagues Sponsored by Civic Organizations

In addition to the baseball promotional work that has been carried on by the organizations enumerated above, Rotary, Kiwanis, Lions and other luncheon clubs as well as chambers of commerce in recent years have been sponsoring baseball leagues of one sort or another. Wherever a club has become interested in this phase of community betterment work such satisfactory results have been secured that the scope of the work has been broadened. The following letter from Mr. Richard Stall of the Stall & Dean Manufacturing Company, a Kiwanian in Brockton, Mass., is interesting:

"At the beginning of last summer, the Kiwanis Club here in Brockton challenged the Rotary Club to a game of baseball. To be sure, all of the men in these clubs are older men, and the quality of baseball played was not necessarily high class, but a great deal of enthusiasm and enjoyment was gotten out of the game; so much so that they bought uniforms and organized a team and played games with other Rotary and Kiwanis Clubs. We had good crowds at the games because of the fact that they were friendly matches played just for the fun of the game.

"From this small start, the Lions Club sent out a challenge and it finally resulted, before the summer was over, in five different Kiwanis Clubs within a radius of fifty miles, putting out teams equipped with uniforms and three Lions Clubs doing the same thing.

"This is just a small local illustration of the possibilities which may be developed if these clubs would solicit and encourage the organization of baseball teams."

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Conclusion

This article is in the nature of an appeal to all of the coaches who believe that baseball is a sport that should be kept alive.

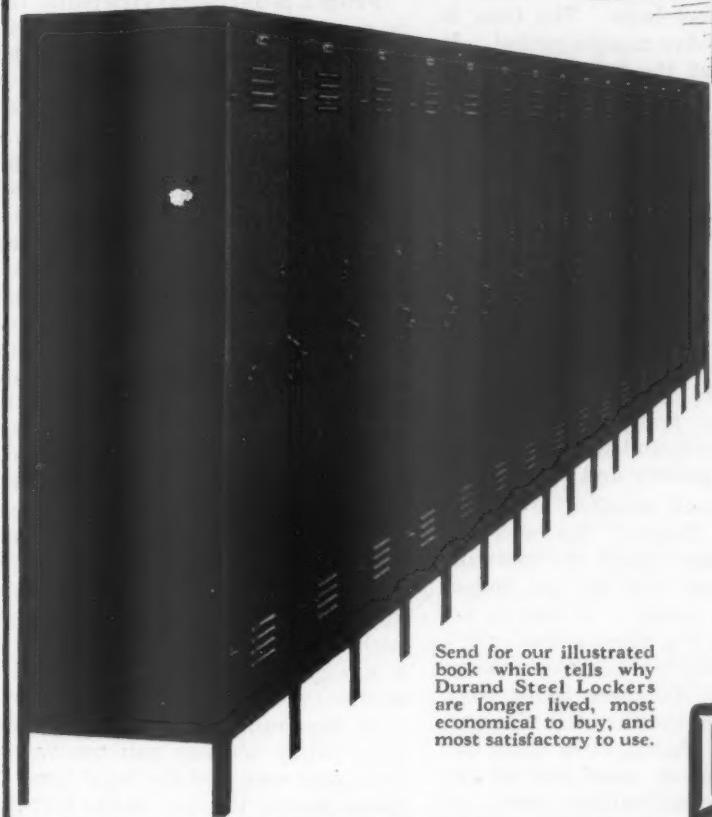
The Fine Points of Baseball

(Continued from page 10)

with his right hand. By this method the baseman must make a distinct move of his hand with the ball, before he can tag the hand. Every extra move the runner can make the baseman do with his hand in tagging him favors the runner and many times the umpire will call him safe, as he should be. (See Illustration 25.)

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An Hour in the Gymnasium

By C. F. Weege, M. D.

THE following suggestions are planned for a class of fifty to sixty high school boys. The time is a regular forty-five minute period. It is assumed that the pupil will come directly from the class room. He may be obliged to carry a few books with him to be ready for the subject following his gymnasium period. He should therefore, have a locker or other safe place for his belongings. He is allowed seven minutes to take off his coat, necktie and collar, put on his gymnasium shoes and get himself ready for work. Drinking fountains and toilet rooms should be convenient. Any pupil who has no gymnasium shoes is barred from the work. He must take a book and go on the running track or gallery and study.

The first seven minutes are given to free play. Most of the boys will line up and take turns at "shooting baskets"; a few will get an indoor ball and play "catch"; (a bat is not allowed during the play period) while a few others will try some exercise on the apparatus. To these latter boys, the enthusiastic teacher will give special attention. He can show them how to prevent injuries, point out reasons why certain combinations were not mastered and demonstrate and suggest new exercises.

Usually the coach finds the first seven minutes have stretched into ten. Coaches of the major sports are becoming more and more appreciative of the fact that apparatus work is a very valuable means of aiding and preparing for efficiency in their specialty.

The bell sounds, the whistle blows or the vocal command is given to "fall in." Most teachers adhere to the time-honored system of having the long line for the length of the gymnasium, the leader being the tallest boy, at the right. If you are of an investigative mind, try this plan. Divide your class, if sixty, into six sections and line them up at right angles to the length of the gymnasium. The smallest ten boys form the first line and the tallest ten form the last line. If you are using a platform, the front line is ten to twelve feet away from you; if you have no elevation you will have to increase that distance to fifteen or eighteen feet. The advantages of this scheme are: the class is in order in much less time, there is no pushing or shoving to get in place or moving sidewise to make room for the slow ones, and you have your class in front of you in a compact body, and all of them under close observation at the same time. Announcements, criticism of the condition of

the lockers, or even a few remarks of a hygienic character may be made and you are not talking to one end or section of the line only.

From a pedagogical viewpoint, there is another and even more important advantage to this system. You have six individual divisions and the divisions are pitted against each other for promptness, good posture and many other little points of competition. The first section is responsible for all the balls, the second has to see that the apparatus is in its proper place, etc. You may make one division be responsible for the condition of the locker room, and in a like manner apportion duties to each division. Then the boys at the flanks of each division or section each have their special duty. The one at the right, acts as captain and is responsible for his section. The left flank man attends to the roll call. Thus every boy is satisfied that he has some specific duty to perform, and you are developing his character by making him shoulder definite responsibilities. It makes each boy feel that he is more than just a member between the tallest and the shortest.

If the roll call takes you longer than thirty seconds you are wasting both your own and the boys' time. In three lessons the boy at the left flank of the section should have memorized the names of the boys in his section. You have your list in your book to confirm the alignment. At the command, "report," the boy in the first line answers, "Ty Cobb absent, sir, Rogers Hornsby, no gym shoes." Section two, present, sir!" You have a special mark for each and enter it in your book. This method assures the teacher that he knows about every boy and if one is wanted in the office or if the principal wants to inform a parent of Jimmie's progress and calls for your report, you do not have to go around asking about it.

A Symposium on Fundamentals of Baseball

(Continued from page 16)
scoring position, and if the play should go through, there is a chance that it will upset the opponents enough to enable the team to stage a rally on the play.

The double steal with men on first and third may be worked in several ways with the man on first playing a slightly different part each time.

With none out, he should usually play it safe; one out, it is all right to go down; two out, he should go down every time. The runner on first, if caught going down, should hold up and get in a run-up, thus giving the runner on third a chance to score.

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Junior High School

(Continued from page 29)

the other inspection necessary to determine the corrective gymnastics the child may need. It is a very good idea to have another examination at the end of the year in order to note any improvement which has taken place and to let the child know just what he has accomplished, that he may be encouraged to work harder the next term, and to keep his interest in himself. There isn't any thing that will make an individual work harder than to get him interested in himself.

At this age the child should have at least one lecture a month on the subject of personal hygiene. A whole period should be set aside for this lecture. In addition, there are always opportunities during class work to offer suggestions and hints along this line. When a regular lecture is given, it should not be at all technical, but should deal with experiences of every day life and should be explained in such terms as will be easily understood by the child. The schedule should be arranged so that the boys' and girls' exercise classes will not conflict in any way, since both are usually compelled to use the same gymnasium in junior high schools. In our school we give three hours of physical training a week; one hour on the gymnasium floor, one hour swimming, and one hour out-of-doors. While the boys are using the pool on Monday, the girls are out-of-doors or on the gymnasium floor. On Wednesday the girls use the gymnasium, and the boys use the swimming pool. On Friday the girls use the swimming pool while the boys take work out-of-doors. This works out very nicely here but would not be quite so practical in the northern states where the weather becomes very cold. Fresh air is essential even in cold weather and the children should be warmly clothed and sent out to play and get fresh air in their lungs.

As for the work on the gymnasium floor, I would confine the first nine weeks mostly to marching and running, deep-breathing and free standing exercises. During the class period however, there would be relay races and games to relieve the monotony. Because the child at this age is very restless and full of life, the class period should be made as interesting as possible. In the next eighteen weeks, I would go on to the apparatus, at the same time keeping on with the free standing exercises and progressing from lesson to lesson. The last nine weeks would be devoted to

out-of-doors work, and the seasonal sports, such as baseball, tennis and track.

I believe that junior high schools should have athletic teams in every sport, but that competition should be allowed only to a mild degree. As many as possible should be encouraged to try out for the various teams, thereby having as many as possible receive the advantage of the training and the exercise.

A full schedule for each branch of sport at this time of the child's life is unwise as it is too strenuous. I would recommend about six games of football in the fall, a light schedule of soccer to follow; six games of basket ball after the holidays; an interschool swimming meet about the middle of February; three weeks later an inter-school track with a cross-country run of about two and a half miles; then a little later a baseball schedule to be arranged for six or eight games and finally at the close of the year an inter-school tennis tournament. It is better for the junior high schools to compete entirely among themselves in cities where there are three or more of these schools.

News From High School Athletic Associations

(Continued from page 31)

mentally exhausted and less eager to play the game.

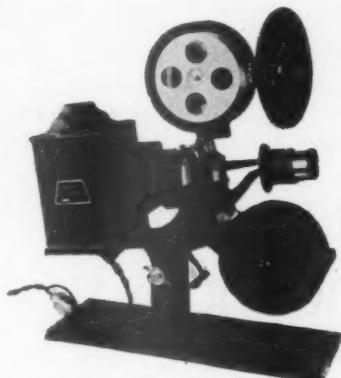
"Undoubtedly the present tendency is to do too much, to overtrain the high school boy when the best results can be secured through a policy of 'too little rather than too much.' In this connection note what Knute Rockne, of Notre Dame, said in an article in the last issue of *ATHLETIC JOURNAL*: 'It is better to have a team underscrimmaged (underworked) but full of eagerness to play football than to have them overscrimmaged (over-worked) and as a result listless.'

"Another thing. Some schools are allowing their teams to go on the field without ever having had the players examined by a physician. This is a dangerous practice and an unnecessary risk that no school man should be willing to take. In every town there is a physician who will be glad to give the boys a physical examination without charge. This is a 'safety first' measure that should not be overlooked. It is an insurance against criticism. If, for instance, it is shown that a boy with a valvular leakage of the heart has been playing, the responsibility is on the physician and not on the school man.—Don't take a chance in this regard."

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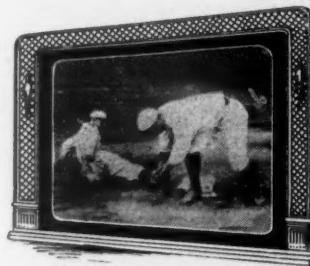
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Max Carey—on base running.

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